



03 CHAPTER

CorelDRAW 2018

LEARNING OBJECTIVES

In this section, you'll learn about

- Vector graphics and Bitmaps
- CorelDRAW 2018
- Creating a New Document
- Exploring the toolbox
- Drawing Shapes
- Using the Color Palette
- Resizing shapes of objects
- Rotating Objects
- Saving a Drawing
- Closing Document Files



About CorelDRAW

CorelDraw (styled **CorelDRAW**) is a **vector graphics application**. It is developed and marketed by **Corel Corporation**. Corel Corporation is a **Canadian software company**. The latest

version of CorelDRAW is **CorelDraw Graphics Suite 2018**. It was released in April 10, 2018.

CorelDraw is a versatile graphics application for creating high quality vector illustrations, logo designs, and page layouts.



Fig. 3.1 Corel DRAW 2018



Understanding vector graphics and bitmaps

There are two main types of computer graphics. They are vector graphics and bitmaps.

Vector graphics

Vector graphics are made of **lines and curves**. They are generated from **mathematical descriptions**. These graphics are ideal for **logos and illustrations**. As they are **resolution-independent graphics**, they can be scaled to any size, or printed and displayed at any resolution, without losing detail and quality.

Bitmaps

Bitmaps are also known as **raster images**. They are composed of small squares called **pixels**. Each pixel is mapped to a location in an image and has numerical colour values.

As Bitmaps reproduce color gradations well, they are excellent for photographs and digital paintings.

Bitmaps are **resolution-dependent images** which means that they represent a fixed number of pixels. They look good at their actual size, but they appear jagged

or lose image quality when scaled, or when displayed or printed at a resolution higher than their original resolution.

By using CorelDRAW you can create vector graphics. You can also import bitmaps (raster images) such as JPEG and TIFF files into CorelDRAW and add them to your drawings.

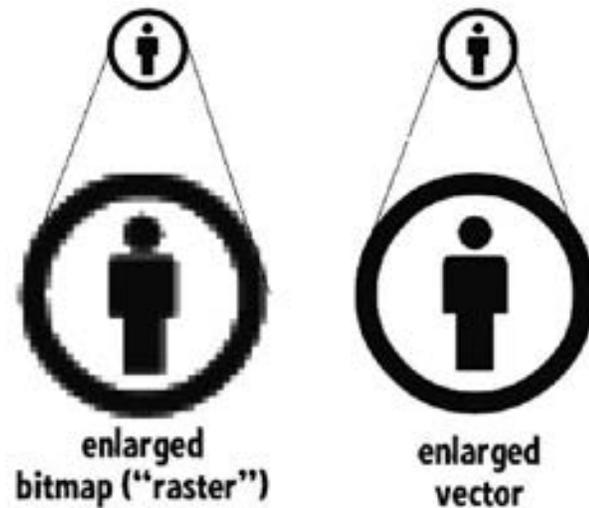


Fig. 3.2 Bitmap image and vector image

If you enlarge a bitmap in your page layout package, you may lose resolution and it may appear jagged. If you shrink a bitmap in your page layout package, the result will look good.

CorelDRAW Terms

Before getting started with CorelDRAW you should be familiar with the following terms.

Term	Description
Object	An object is an element in a drawing such as an image, shape, line, text, curve, symbol, or layer.
Drawing	Drawing is the work you create in CorelDRAW, for example, custom artwork, logos, posters, and newsletters.
Vector graphic	Vector graphic is an image generated from mathematical descriptions that determine the position, length, and direction in which lines are drawn.



Bitmap	Bitmap is an image composed of grids of pixels or dots.
Docker	Docker is a window that contains available commands and settings relevant to a specific tool or task.
Flyout	Flyout is a button that opens a group of related tools or menu items.
List box	List box is a list of options that drops down when a user clicks the down arrow button.
Artistic text	An Artistic text is a type of text to which you can apply special effects, such as shadows.
Paragraph text	Paragraph text is a type of text to which you can apply formatting options, and which can be edited in large blocks.
Combo boxes	Combo (short for combination) is a num box with a clickable selection button for access to preset values. You can either a specific value in a combo box by typing or choose a value from the selector.
Spinners	These are similar to combo boxes, in that they can be used to specify values by typing or using mouse actions.
Pop-up menus	To access pop-up menu commands and options, click your right mouse button on any given point.

Starting CorelDRAW 2018

You can start CorelDRAW 2018 directly from your computer's desktop or from Windows Start Menu.

Using the Start Menu

1. Choose **Start > All Programs > CorelDRAW Graphics Suite 2018 > CorelDRAW 2018**.
2. The **CorelDRAW 2018 - Welcome Screen** window will appear.

Using the Shortcut

1. First, locate the CorelDRAW 2018 shortcut icon. This is a colourful balloon shaped icon with CorelDRAW 2018 written beneath it.
2. When you find it, position the mouse over the CorelDRAW 2018 icon and double click to open the CorelDRAW 2018.

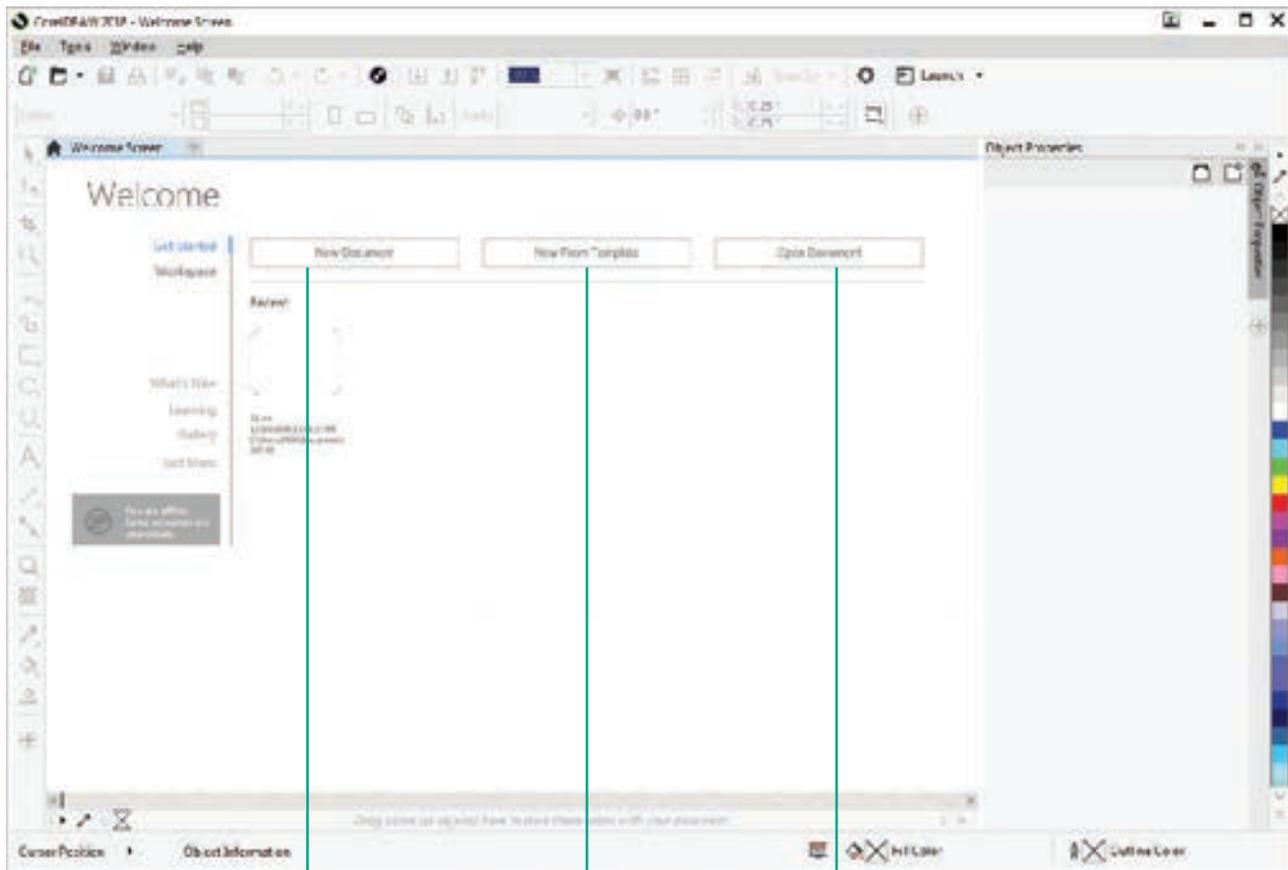
The CorelDRAW 2018 - Welcome Screen window will appear.



Fig. 3.3 Corel DRAW 2018 icon

CorelDRAW 2018 Welcome window

When the Welcome Screen appears, it shows some common options that are used in the beginning.



If you click on New Document, it creates a blank document in which you can design a graphic.

If you click on New From Template, it enables you to choose from a list of pre-designed page templates that you can use as a basis to begin a design.

If you click on Open Document, it opens the Open Drawing dialog box, enabling you to select from any saved graphic image file.

3.4 Corel DRAW 2018 Welcome Window

To create a New Document

1. Click on **New Document** button in the Welcome Screen window.
2. Now **Create a New Document** dialog box appears. It lets you specify a wide range of document properties.
You can name the document, set the page size, select a color mode such as CMYK or RGB, and set color profiles.
3. Click on **OK** button.

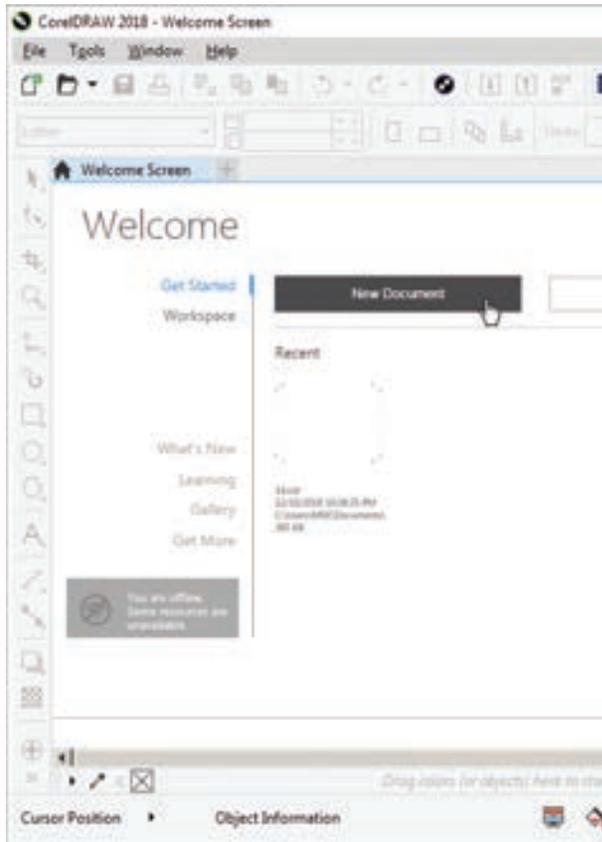


Fig. 3.5 Create a New Document dialog box

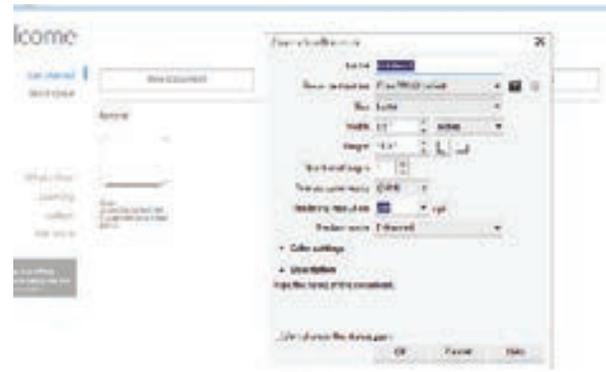


Fig.3.6 New Document button



Fig. 3.7 Create a New Document dialog box

Create a New Document

Name: → Type the name of the document

Preset destination: CorelDRAW default

Size: Letter → Select the page sizes for your document.

Width: 8.5" inches → Select the units of measurement for your document, such as inches, millimeters, or pixels.

Height: 11.0" → Select either a landscape or a portrait orientation for your document.

Number of pages: 1 → Select the number of pages for the document.

Primary color mode: CMYK

Rendering resolution: 300 dpi

Preview mode: Enhanced

Color settings

Description

Type the name of the document.

Do not show this dialog again

OK Cancel Help

3.8 Create a New Document dialog box



CoreIDRAW 2018 Document Window

After clicking on OK button in the **Create a New Document** dialog box, the CoreIDRAW document window will appear as shown in Fig. 1.8

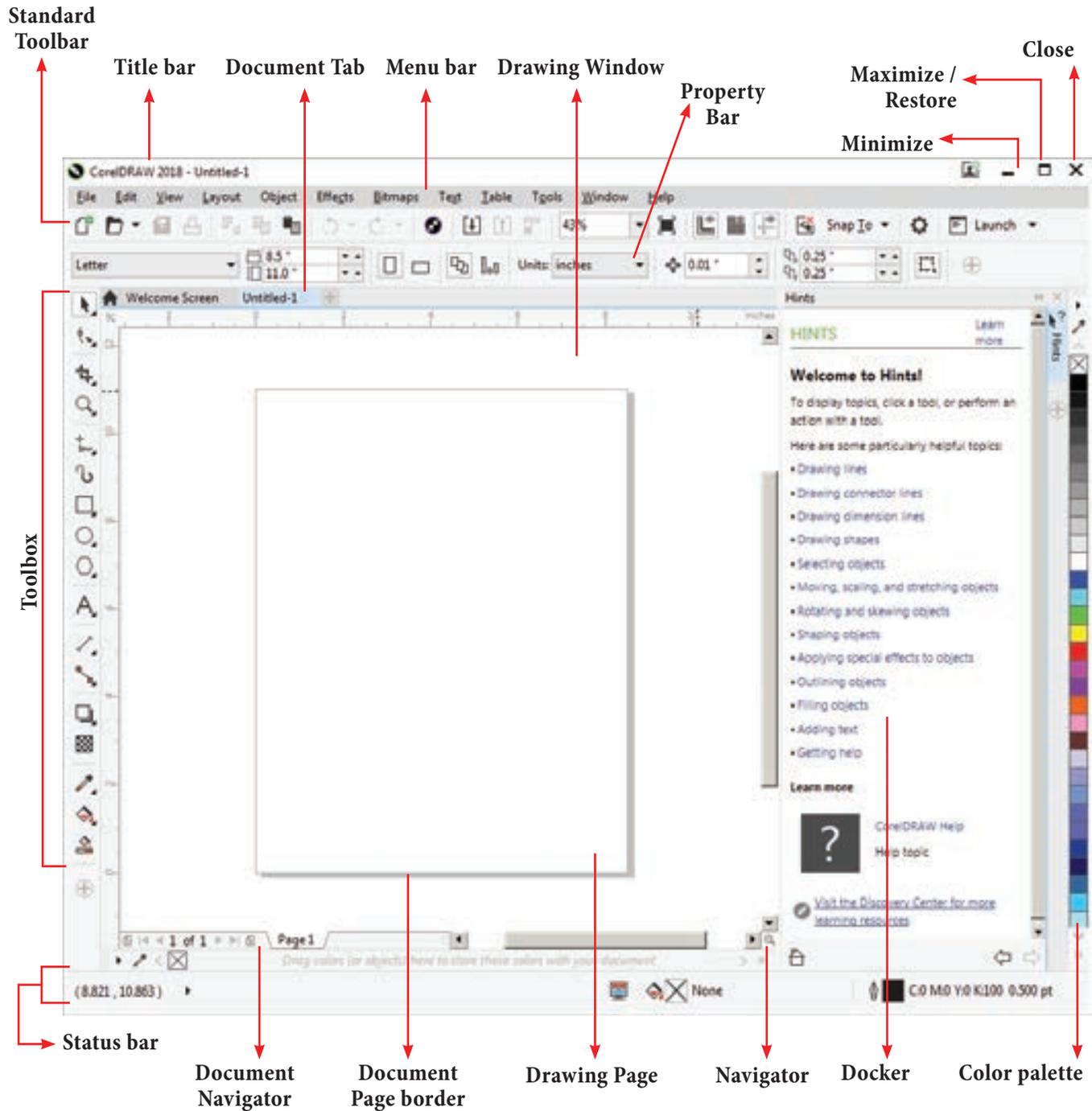


Fig. 3.9 Corel DRAW 2018 Document Window

S. No.	Part	Description
1	Title bar	Title bar is the area displaying the title of the currently selected drawing.
2	Menu bar	Menu bar is the area containing pull-down menu options.



3.	Standard Toolbar	Standard Toolbar is a detachable bar that contains shortcuts to menu and other commands.
4.	Toolbox	Toolbox is a docked bar with tools for creating, filling, and modifying objects in the drawing.
5.	Property bar	Property bar is a detachable bar with commands that relate to the active tool or object. For example, when the Rectangle tool is active, the rectangle property bar displays commands that create and edit the rectangle.
6.	Document tab	Document tab is a tab displays for each open document to allow you to quickly move between documents.
7.	Drawing window	The area outside the drawing page is called the Drawing window. It is bordered by the scroll bars and application controls.
8.	Drawing page	The rectangular area inside the drawing window is called the Drawing page. It is the printable area of the document window.
9.	Rulers	There are two rulers in the window. They are horizontal ruler and vertical ruler. They are used to determine the size and position of objects in a document.
10.	Docker	A Docker window is so called because it is generally docked to all right edge of a main window. If you open two or more docker windows at a time these windows remain in a tabbed position and you can bring the desired window in front by clicking its tab.
11.	Document navigator	Document navigator is the area at the bottom left of the application window that contains controls for moving between pages and adding pages.
12.	Navigator	Navigator is a button at the lower-right corner of the application window that opens a smaller display to help you move around a drawing.
13.	Color palette	Color palette is a dockable bar. It contains color swatches. The tiny squares of colour you see in this palette are referred to as wells.
14.	Status bar	Status bar is the area at the bottom of the document window. It displays information about selected object properties such as type, size, colour, fill type and outline. The status bar also displays the current mouse position in the document window.

Standard toolbar

The standard toolbar contains buttons and controls that are shortcuts to many of the menu commands.



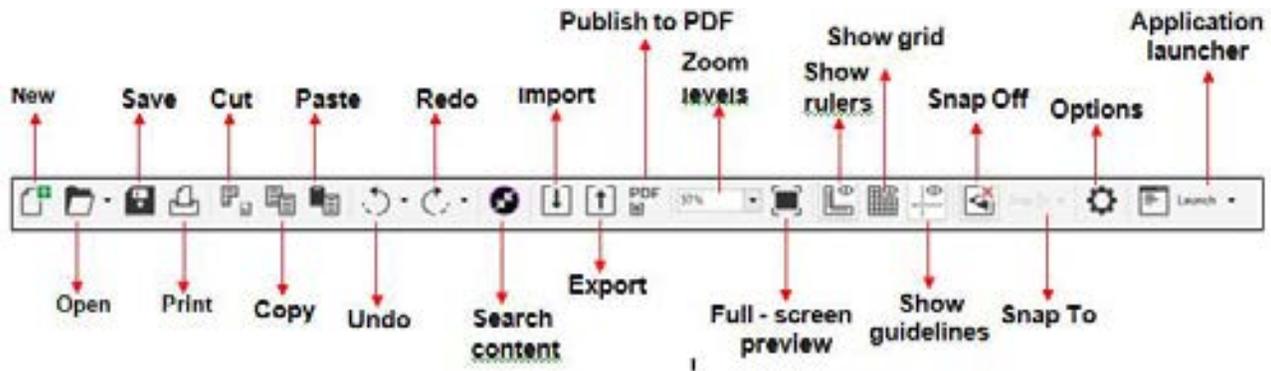
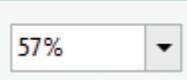
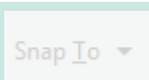


Fig. 3.10 Standard tool bar

Toolbar	Icon	Keyboard Shortcut	Used to
1. New		Ctrl + N	Start a new drawing
2. Open		Ctrl + O	Open a drawing
3. Save		Ctrl + S	Save a drawing
4. Print		Ctrl + P	Print a drawing
5. Cut		Ctrl + X	Cut selected objects to the Clipboard
6. Copy		Ctrl + C	Copy selected objects to the Clipboard
7. Paste		Ctrl + V	Paste the Clipboard contents into a drawing
8. Undo			Undo an action
9. Redo			Restore an action that was undone
10. Search Content			CONNECT docker to search for vector art, photos and fonts.
11. Import		Ctrl + I	Import a drawing
12. Export		Ctrl + E	Export a drawing



13. Publish to PDF			Export the document to the PDF file format.
14. Zoom levels			Set a zoom level
15. Full- screen preview		F9	Show a full-screen preview of the document.
16. Show rulers			Show or hide the rulers.
17. Show grid			Show or hide the document grid.
18. Show guide lines			Show or hide the guidelines.
19. Snap Off		Alt + Q	Turn off all snapping. Click again to restore selected snapping options.
20. Snap To			Select a method for aligning objects on the page.
21. Options		Ctrl + J	Set your workspace preferences.
22. Application launcher			Start a Corel application.

Property bar

The property bar is next to Standard toolbar. It displays the most commonly used functions that are relevant to the active tool. Even though it looks like a toolbar, the property bar content changes depending on the tool or task.

For example, when you click the Text tool in the Toolbox, the Property bar shows only text-related commands like formatting, alignment, and editing tools.

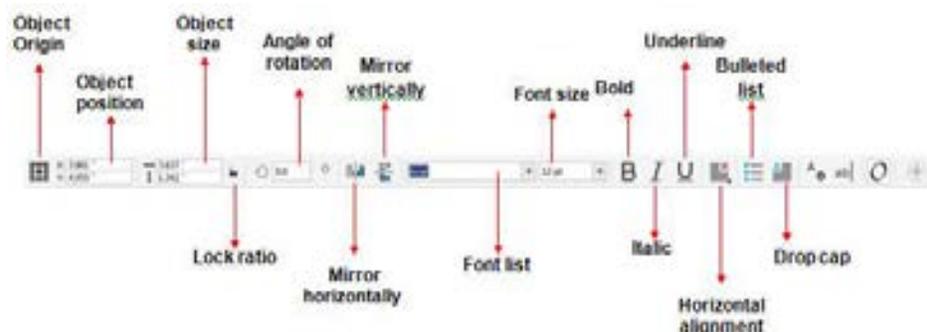


Fig. 3.11 Property bar

When you click the Rectangle tool in the Toolbox, the Property Bar shows only rectangle related commands.

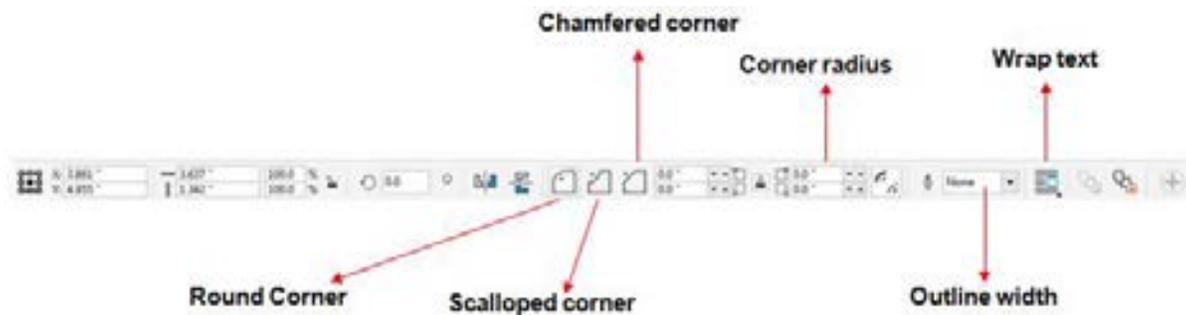


Fig.1.12 Property Bar for Rectangle

When you click the Ellipse tool in the Toolbox, the Property Bar shows only ellipse-specific options.

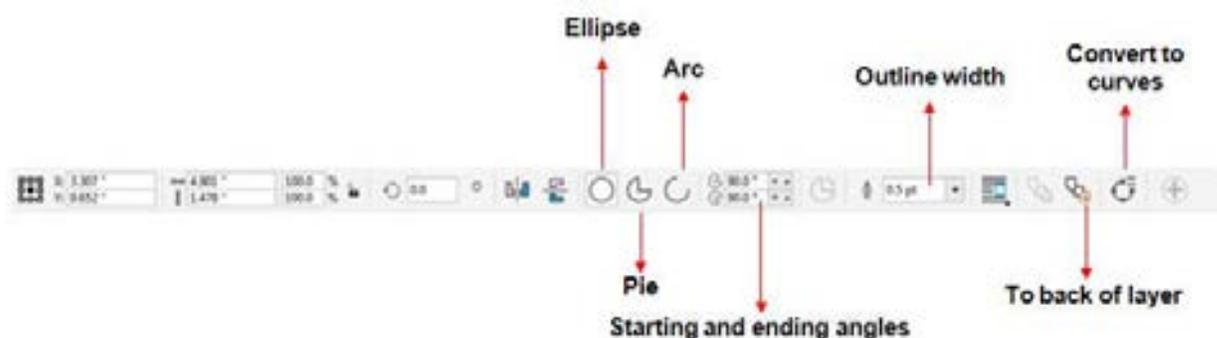


Fig.1.13 Property Bar for Ellipse Tool

Exploring the toolbox

The Toolbox is a component of the application window. It contains more tools for drawing and editing images. Some of the tools are visible, while others are grouped in flyouts. We can access the tools in a flyout by clicking the small flyout arrow in the lower-right corner of the toolbox button.

Tools	Icon	Keyboard Shortcut	Used for
Pick tool			Selecting and transforming objects
Shape Tool		F10	Shaping objects
Crop tool			Removing the areas outside a selection
Zoom tool		Z	Changing the viewing window
Freehand tool		F5	Drawing lines / curves



Artistic Media tool		I	Adding artistic brush, spray, and calligraphic effects
Rectangle tool		F6	Drawing rectangles / squares
Ellipse tool		F7	Drawing ellipses / circles
Polygon tool		Y	Drawing polygons
Text tool		F8	Adding Artistic and Paragraph text Parallel
Dimension tool			Drawing slanted dimension lines
Straight-Line Connector tool			Drawing a straight line to connect two objects
Drop shadow tool			Applying shadows behind or below objects
Transparency tool			Setting transparency for a selected object
Color Eyedrop per tool			Selecting a fill from an object
Smart Fill tool			Setting fill attributes

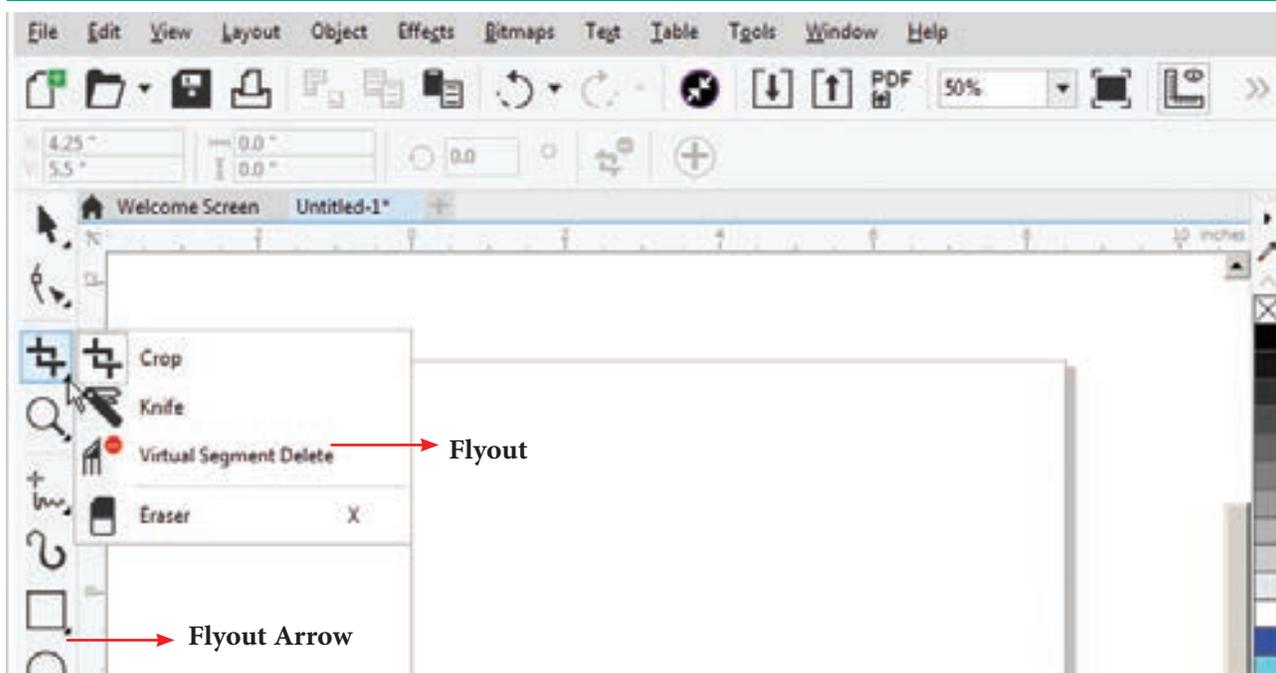


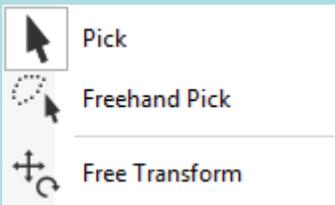
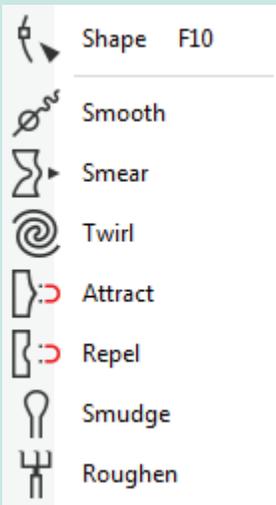
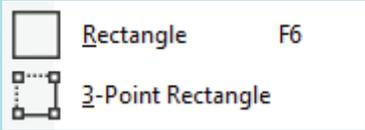
Fig.1.14 Flyout Menu and Flyout Arrow



Exploring the Flyouts

The toolbox contains a range of tools that can be used for specific drawing and editing tasks. Some tools are used to draw shapes, and other tools are used to apply colors, patterns, or fills to objects. Some tools belong to flyouts. They are groups of related tools. A small arrow which is in the lower right corner of a toolbox button indicates that the tool belongs to a flyout. The last-used tool in the flyout appears on the button. We can access the tools in a flyout by clicking the flyout arrow.

The following table provides descriptions of the flyouts and tools in the CorelDRAW toolbox.

Tools	Flyouts	Descriptions
Pick tool		Lets you access the Pick, Freehand Pick and Free Transform tools.
Shape Tool (F10)		Lets you access the Shape, Smooth, Smear, Twirl, Attract, Repel, Smudge and Roughen tools.
Crop tool		Lets you access the Crop, Knife, Virtual Segment Delete and Eraser tools.
Zoom tool (Z)		Lets you access the Zoom and Pan tools.
Rectangle tool (F6)		Lets you access the Rectangle and 3-Point Rectangle tools



Freehand tool (F5)	 Freehand F5  2-Point Line  Bézier  Pen  B-Spline  Polyline  3-Point Curve <hr/>  Smart Drawing Shift+S  LiveSketch S	Lets you access the Freehand, 2- Point Line, Bezier, Pen, B-Spline, Polyline, 3-Point Curve, Smart Drawing and LiveSketch tools.
Ellipse tool (F7)	 Ellipse F7  3-Point Ellipse	Lets you access the Ellipse and 3- Point Ellipse tools.
Polygon tool (Y)	 Polygon Y  Star  Complex Star <hr/>  Impact tool <hr/>  Graph Paper D  Spiral A <hr/>  Basic Shapes  Arrow Shapes  Flowchart Shapes  Banner Shapes  Callout Shapes	Lets you access the Polygon, Star, Complex Star, Impact tool, Graph Paper, Spiral, Basic Shapes, Arrow Shapes, Flowchart Shapes, Banner Shapes and Callout Shapes tools.
Text tool (F8)	 Text F8  Table	Lets you access the Text and Table tools.
Interactive Fill tool	 Interactive Fill G  Mesh Fill M	Lets you access the Interactive Fill and Mesh Fill tools.



Color Eyedropper Tool	 Color Eyedropper  Attributes Eyedropper	Lets you access the Color Eyedropper and Attributes Eyedropper tools.
Drop Shadow Tool	 Drop Shadow  Contour  Blend  Distort  Envelope  Extrude  Block Shadow	Lets you access the Drop Shadow, Contour, Blend, Distort, Envelope, Extrude, Block Shadow tools.
Parallel Dimension tool	 Straight-Line Connector  Right-Angle Connector  Rounded Right-Angle Connector  Anchor Editing	Lets you access the Parallel Dimension, Horizontal or Vertical Dimension, Angular Dimension, Segment Dimension and 3- Point Callout tools.
Straight-Line Connector tool	 Parallel Dimension  Horizontal or Vertical Dimension  Angular Dimension  Segment Dimension  3-Point Callout	Lets you access the Straight-Line Connector, Right-Angle Connector, Rounded Right-Angle Connector and Anchor Editing tools.

2. DRAWING SHAPES

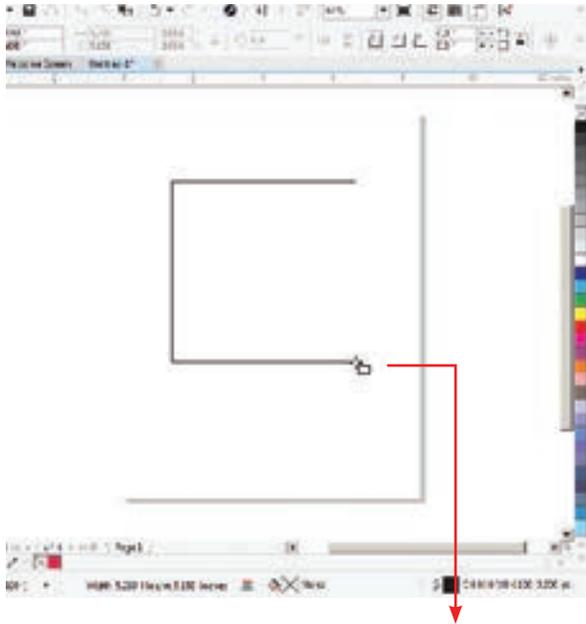
CorelDRAW has different shape tools that you use to create ellipse(including circles), rectangle (including squares), polygons, stars and some basic shapes.

Drawing rectangles and squares

Drawing a Rectangle

1. To draw a rectangle, select the Rectangle tool in the toolbox. The mouse pointer changed to a crosshair with a small rectangle beneath it.
2. Click and drag anywhere in the drawing area. As you drag, a rectangle appears.
3. Release the mouse button when the rectangle is of the desired size.
4. Now a rectangle will appear on the screen.





Rectangle Tool Cursor

Fig.3.15 Drawing a Rectangle

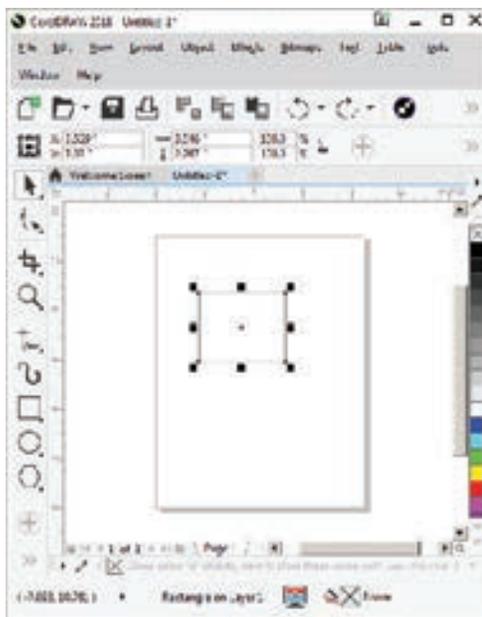


Fig.3.16 Rectangle

As you click and drag using the cursor, you'll also notice that the Status bar and Property bar show coordinates, width, and height properties detailing your new object's shape.

Drawing a Square

1. To draw a square, select the Rectangle tool in the toolbox. The mouse pointer changes to a crosshair with a small rectangle beneath it.

2. Click on anywhere in the drawing area and hold down the **Ctrl** key while dragging the mouse pointer.
3. Release the mouse button where you like the end of the square.

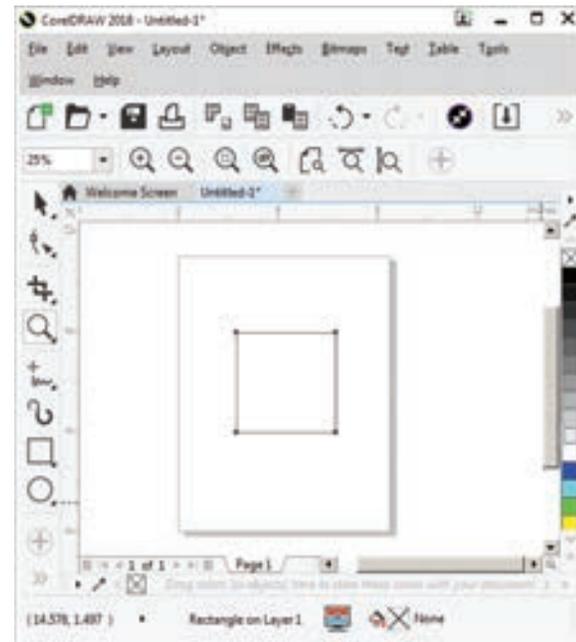


Fig.2.17 A Square

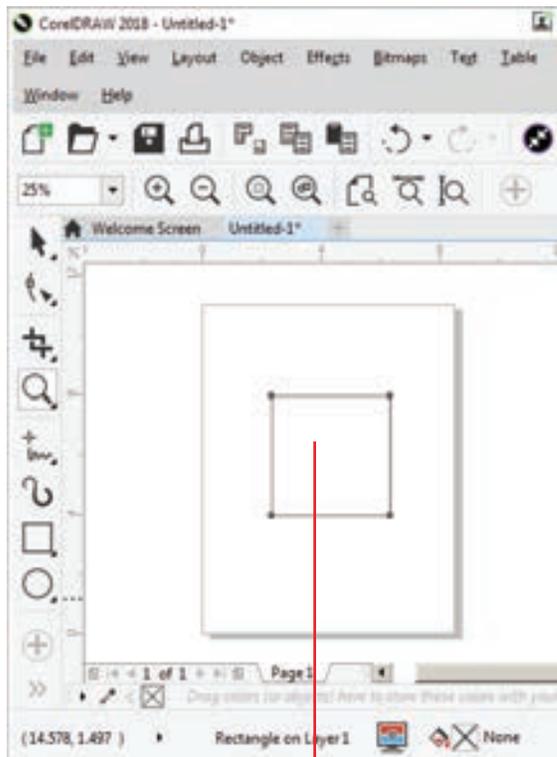
Creating a Rounded Rectangle

After drawing a rectangle, you can optionally round its corners. You can round all corners at once or choose the ones you want to round. Corners can be slightly rounded to create a softening effect or very rounded, almost changing the rectangle into a circle.

To round the corners of a rectangle:

1. In the toolbox, select the **Shape Tool** icon from the Shape Tool layout or press **F10** key.
2. Select the rectangle you wish to round. Four black nodes appear around the rectangle.
3. To set the same rounding for all corners make sure that all nodes are selected (black) and then drag any node. See Figures 3.18(a)-3.18(c)





Four black nodes appear around the rectangle.

Fig.3.18 (a) Creating a Rounded Rectangle

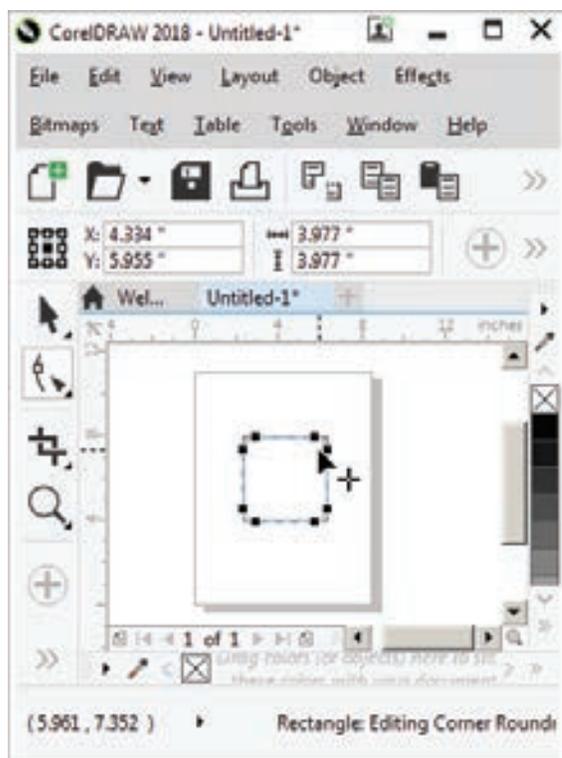


Fig.3.18 (b)

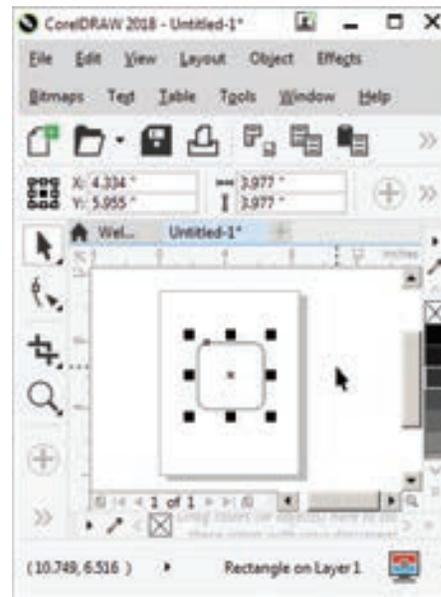


Fig.3.18 (c) Creating a Rounded Rectangle

Creating ellipses

1. To draw an ellipse (also known as an oval), select the **Ellipse tool** in the toolbox. The mouse pointer changes to a crosshair with a small ellipse beneath it.
2. Click on anywhere in the drawing area and drag the mouse pointer.
3. Release the mouse button where you like the end of the ellipse.

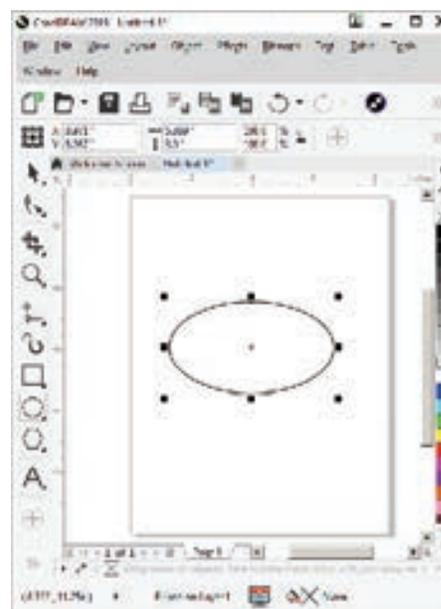


Fig.3.19 An Ellipse



Creating Circles

1. To draw a circle, select the **Ellipse tool** in the toolbox. The mouse pointer changes to a crosshair with a small ellipse beneath it.
2. Click on anywhere in the drawing area and hold down the **Ctrl** key while dragging the mouse pointer.
3. Release the mouse button where you like the end of the circle.

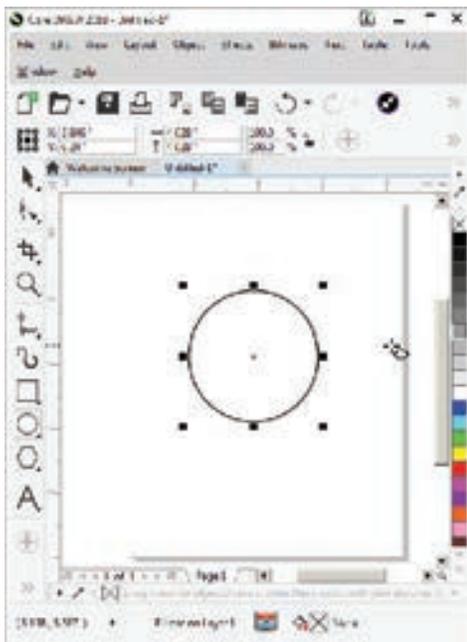


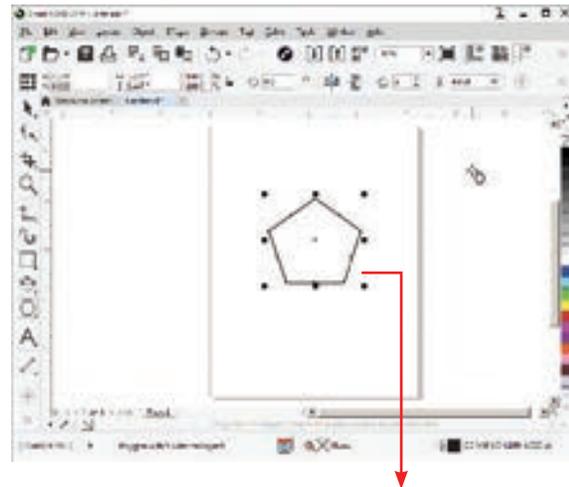
Fig.3.20 A Circle

Creating Polygons

1. To draw a polygon (also known as pentagon: a five-sided figure), select the **Polygon tool** in the toolbox. The mouse pointer changes to a crosshair with a small polygon beneath it.
2. Click on anywhere in the drawing area and drag the mouse pointer.
3. Release the mouse button where you like the end of the polygon.
4. To increase the number of sides of your polygon, select the polygon you have drawn using the Pick tool.

5. Place the mouse pointer on the Number of Points on Polygon text box and type the number of sides you like for your polygon.

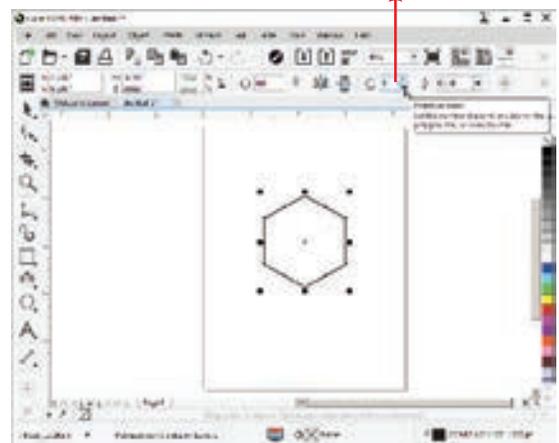
You can also set the number of sides for your polygon and then draw it.



Pentagon - a five-sided figure

Fig. 3.21 Five - sided Pentagon

Points or sides



3.22 Six - Sided Pentagon

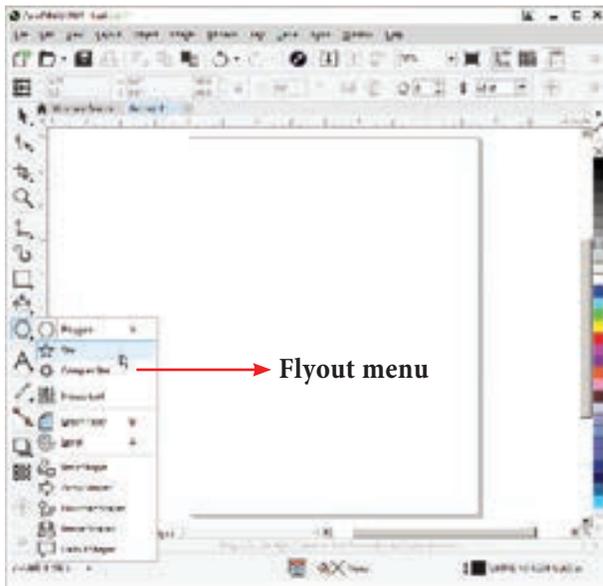
Creating Stars

Polygon tool has a small arrow in the lower-right corner of the tool. That little arrow indicates that this tool has a flyout.

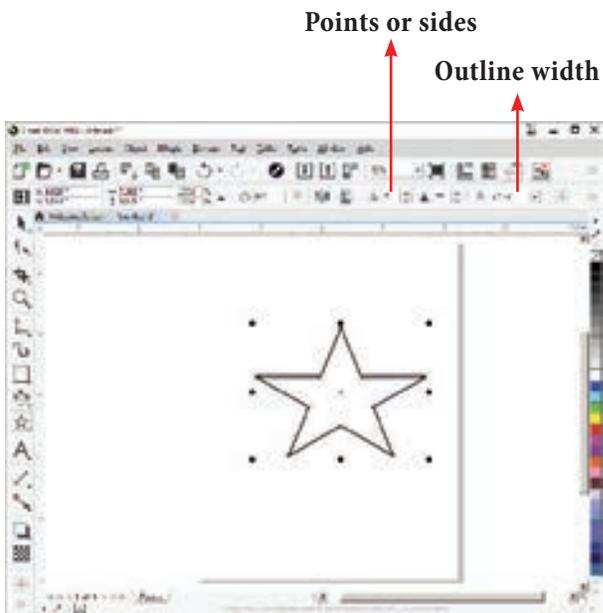
To draw a star,

1. Click on the Polygon tool and hold down the mouse key. A flyout menu will appear showing you other tools.

2. Click on the Star tool from the flyout menu.
3. Click on anywhere in the drawing area and drag the mouse pointer.
4. Release the mouse button where you would like the end of the star.



3.23 Star Tool



3.24 Creating a Star

Drawing Spirals

There are two types of spirals. They are

1. Symmetrical spiral
2. Logarithmic spiral.

A Symmetrical spiral expands evenly so that the distance between each revolution is equal. A Logarithmic spiral expands with increasingly larger distances between revolutions.

You can draw spirals of different sizes with Spiral tool.

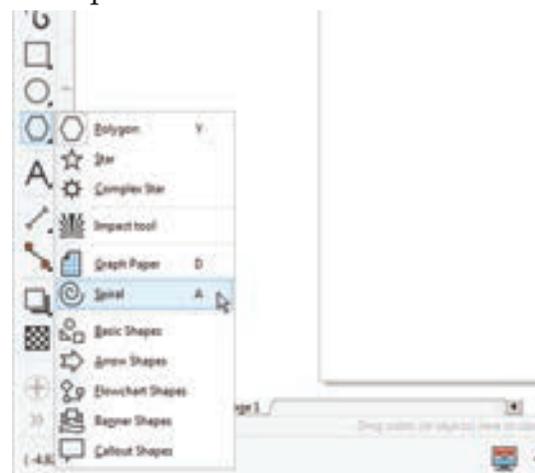
To draw a spiral,

1. Click and hold the **Polygon tool**. A flyout menu will appear.
2. Click on the **Spiral tool** from the flyout menu.
3. Now you should type a value in the Spiral revolutions box on the property bar to set the number of full-circle revolutions to appear in the new spiral object.
4. Next, click one of the following buttons on the property bar:

- Symmetrical spiral
- Logarithmic spiral

If you want to change the amount by which the spiral expands as it moves outward, move the Spiral expansion slide.

5. Drag diagonally in the drawing window until the spiral is the required size.



3.25 The Spiral Tool

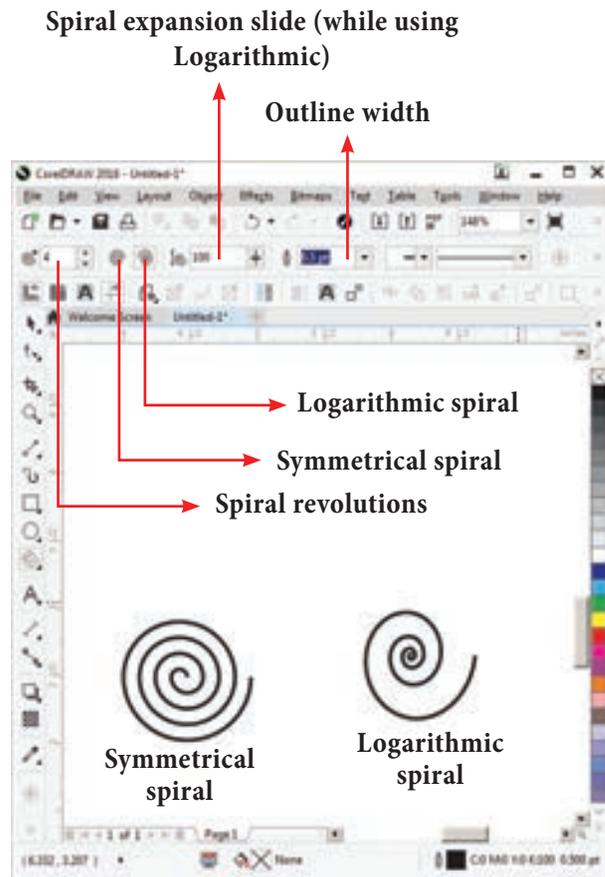


Fig 3.26 Symmetrical spiral and Logarithmic spiral

The objects you can create may have between 1 to 100 revolution, each of which is equal to one complete rotation around its center point. The direction of the revolutions is set according to the click and drag action during creation of the initial shape, as shown below.

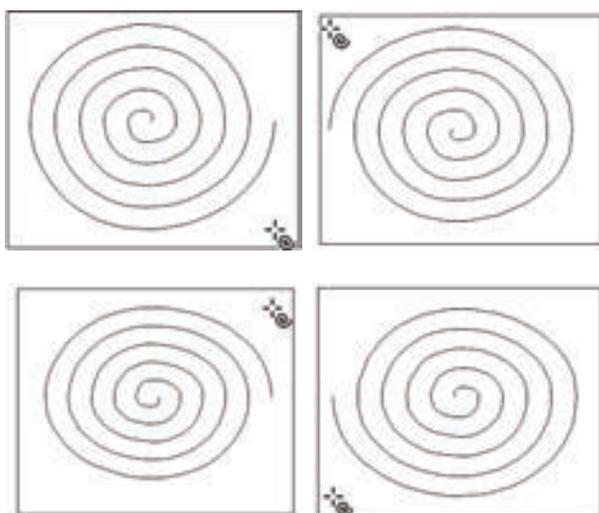
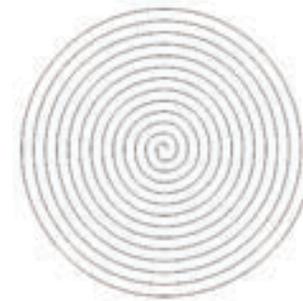


Fig. 3.27 The direction of your spiral revolution is determined by your click – drag direction.



13 Spiral revolutions

Fig. 3.28

Drawing Grids

Using Graph Paper tool, you can draw a grid and set the number of rows and columns. A grid is a grouped set of rectangles that you can break apart.

To draw a grid,

1. Click and hold the **Polygon tool**. A flyout menu will appear.
2. Select the **Graph Paper** tool from the flyout menu.
3. Now type values in the top and bottom portions of the Columns and rows box on the property bar.
The value you type in the top portion of the Columns and rows box specifies the number of columns; the value you type in the bottom portion specifies the number of rows.
4. Click on anywhere in the drawing area where you want the grid to appear.
5. Drag diagonally to draw the required grid.

If you want to draw the grid from its center point outward, hold down **Shift** key as you drag; if you want to draw a grid with square cells, hold down **Ctrl** key as you drag.



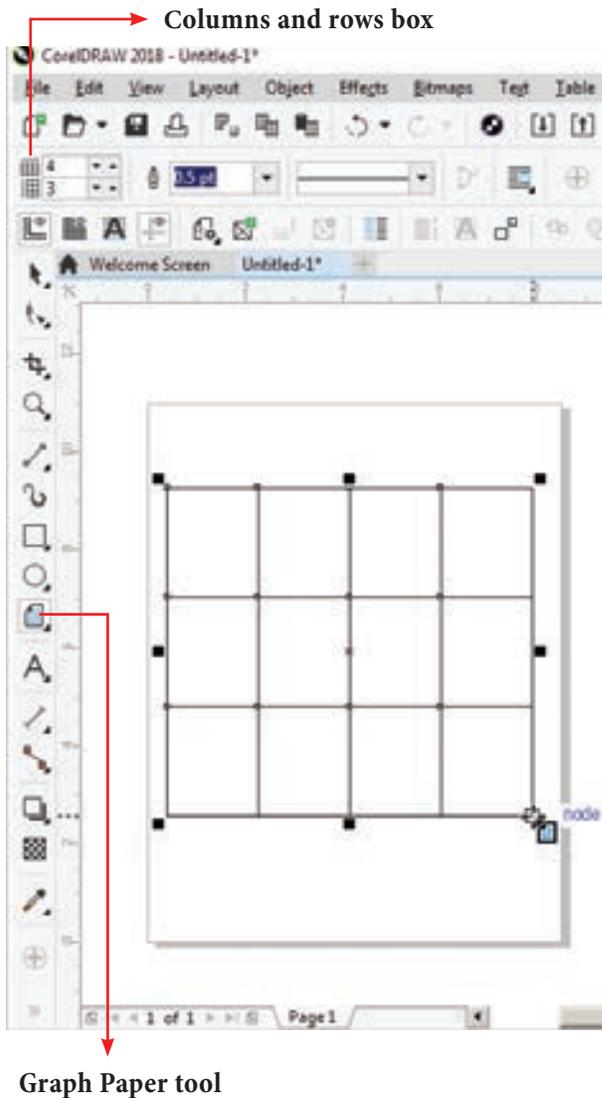


Fig. 3.29 Drawing a Grid

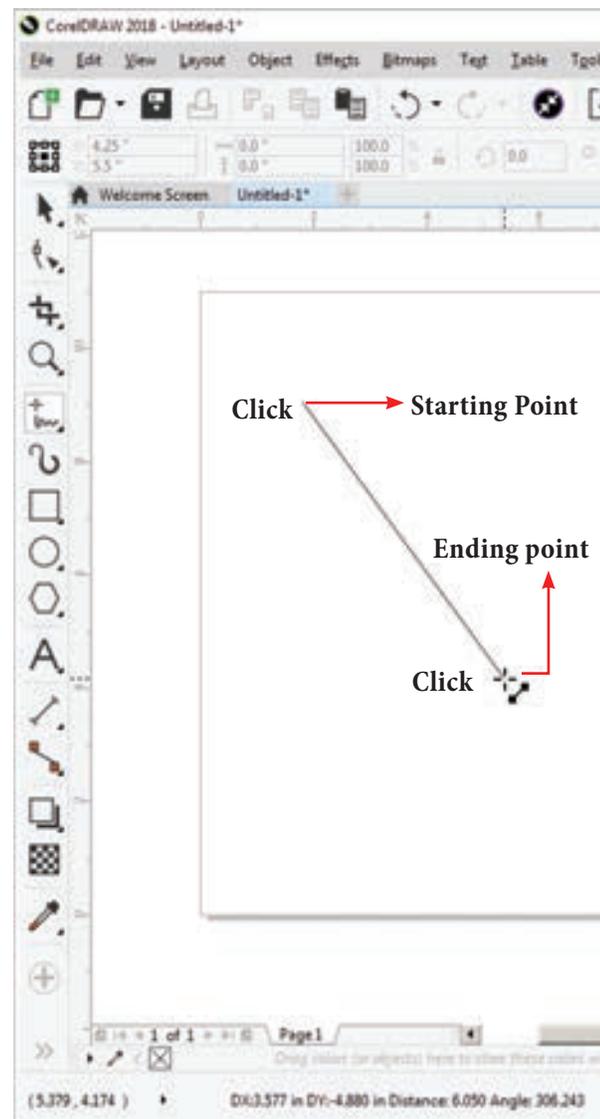


Fig. 3.30 A Rubber band Line

Drawing in Freehand mode

Drawing a straight line

To draw a straight line

1. Click the **Freehand tool** (or) press F5 in the keyboard.
2. Move the cursor to where you want the line to start and click once.
3. Move the cursor towards the position for the endpoint.
You will notice a “**rubberband**” line, which follows your cursor.
4. Release the mouse button where you like to end the line. The line will be drawn.

5. If you want to draw a second straight line connected to the first, continue with Freehand tool, and click again on the endpoint of the last segment.
6. Move the cursor to draw the second segment. Click once when you have the desired second segment positioned correctly. Repeat steps 5 and 6 to draw as many segments as require.

Remember that you must click at two points - the beginning and end of the segment.



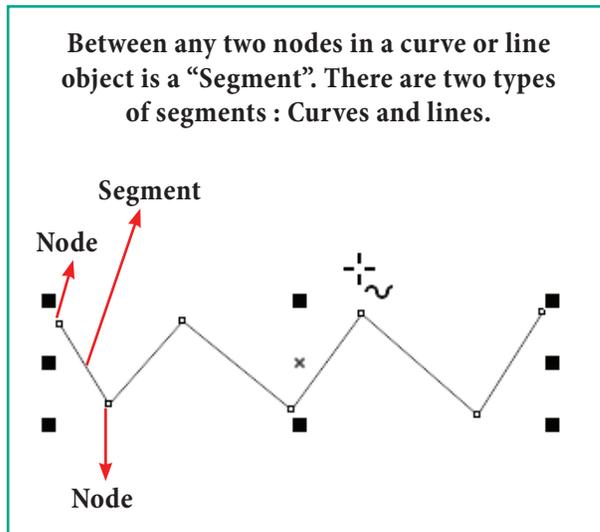


Fig. 3.31 Segments

Adding arrowheads to lines

To add arrowhead to a line

1. Using the Freehand tool draw a line.
2. Select the line.
3. Click the drop-down button on the End Arrowhead Selector on the Property tool bar.
4. Then click the desired arrow tip. Now the line appears with an arrow.

You can set the line style, width, and the colour of the line using the Properties bar.

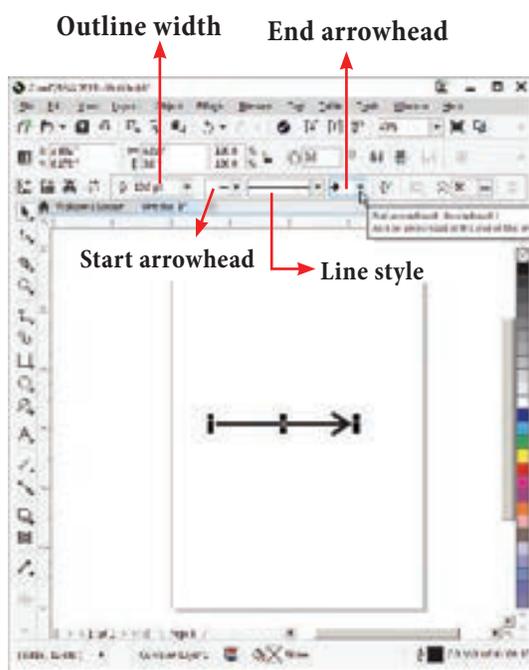


Fig. 3.32 Adding an Arrow head to a line

3. Using the Color Palette

The Color Palette is a characteristic component of CorelDRAW. It can be used docked or undocked.

Viewing Palette Colors

- The tiny squares of colour you see in this palette are referred to as **wells**.
- To scroll the Color Palette color well collection, click the **Up or Down arrow buttons** at the top and bottom of the palette.
- Single clicks using your **left mouse button** on these arrow buttons enables you to scroll the section, one colour well at a time.
- Single clicks with your **right mouse button** produce a Page Up and Page Down effect, scrolling the visible color selection a complete row up or down.
- You can rearrange the order of any collection of colours in the Color Palette by **click-dragging up or down** on any colour well.
- Scrolling provides a way for you to gain access to a limited selection of visible colors. But, when this isn't convenient, you can view the full collection temporarily by clicking the **Expand button**.
- After making your colour selection, Color Palette automatically returns to its original state.
- While the Color Palette is floating, **click-drag** its **title bar** to move it around the window or click the **Close button** to hide it from view.
- Choose **Window > Color Palettes** and select a palette to display any palette in its last used state.

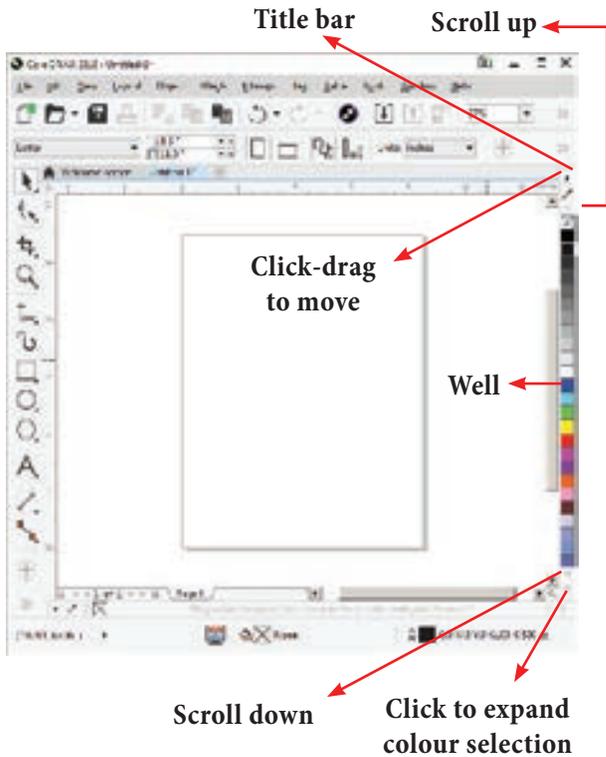


Fig. 3.33 Color Palette

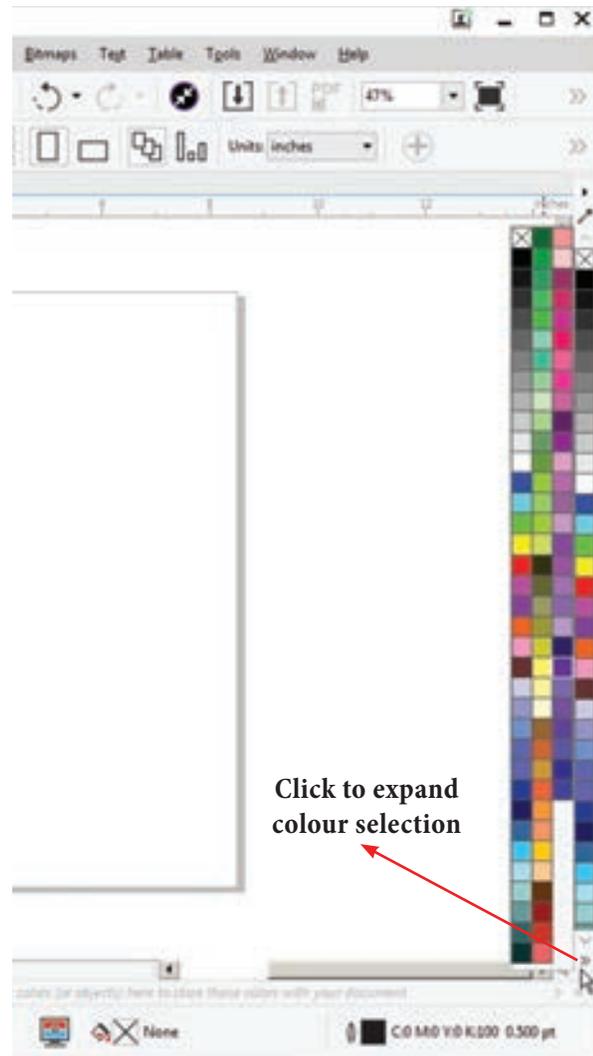


Fig. 3.35 Expanding colour selection

Click the Close button to hide it from view.

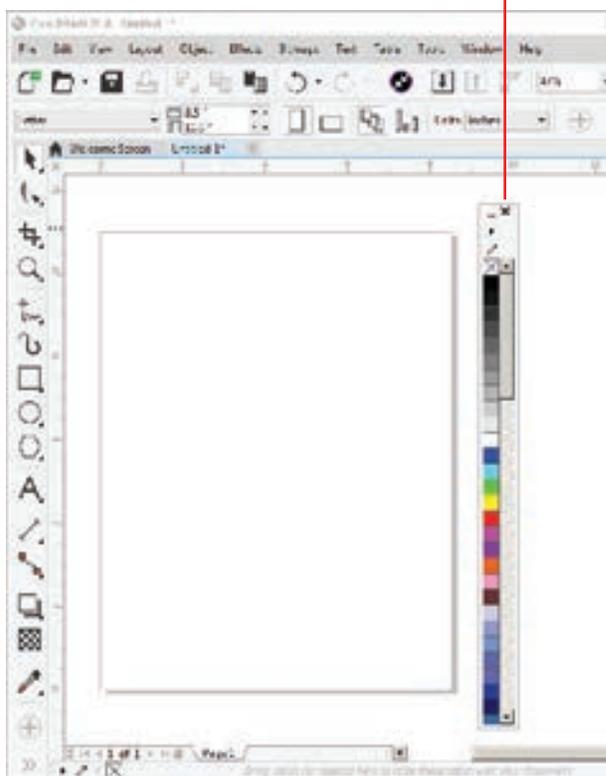


Fig. 3.34 Close button to hide color palette

Changing Palette Options

The Options flyout button on the Color Palette features several important commands, enabling you to apply fill and outline colors (as opposed to using left and right mouse button clicks to apply colours to objects) or control how the palette itself is viewed.

You can use Edit commands to change a palette colours, open the Palette Editor, or locate a specific colour. You may also view colors by name only by choosing the Show Color Names option.





Color palette options flyout arrow

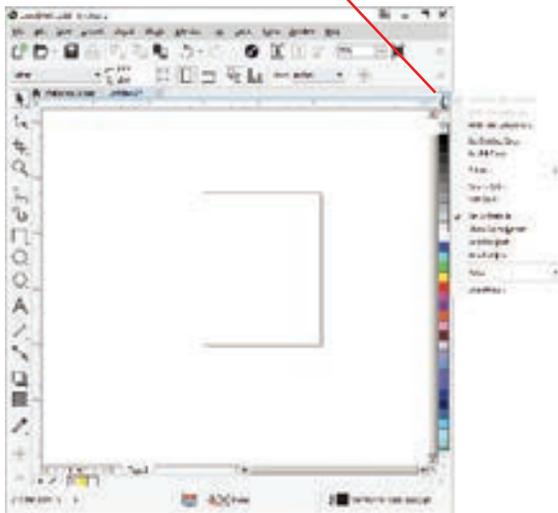


Fig. 3.36 Changing Palette Options

Selecting Fill and Outline Colours

To fill colour to any object :

1. Select the object using the Pick tool.
2. Click on any colour on the Color palette.
3. The selected colour will be applied to the object.
4. Right click on any colour on the Color palette.
5. The outline colour of the selected object will change to the selected colour.

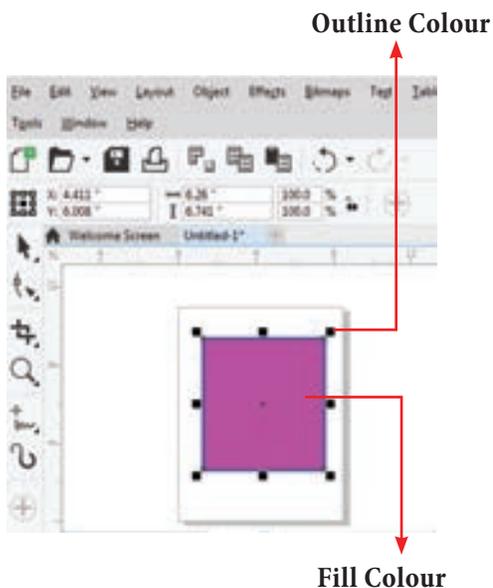


Fig. 3.37 Filling colour to an object

4. Resizing shapes of objects

Resizing shape means changing the size of the shape by making it larger or smaller than the original one. You can resize shape objects by dragging the handles. When you drag a handle in towards the centre of the object, you make it smaller. When you drag out, away from the centre, you make the object larger.

1. Select the object to be resized. The handles appear around the object. Place your mouse pointer over the handle.
2. Click and drag the handle to resize the shape of the object.

If you drag a corner handle, you maintain the proportion between height and width as you resize your object. But if you drag from a side or top handle, you will change not only the size but also the shape of the object.

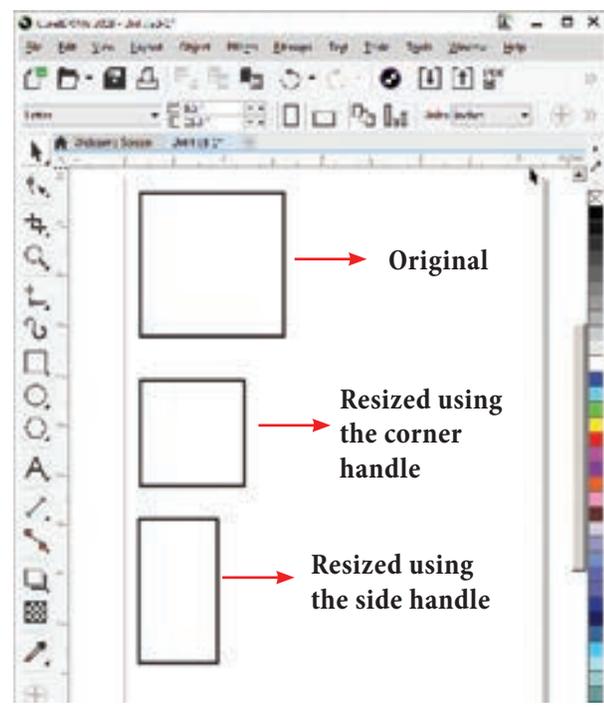


Fig. 3.38 Resizing shapes of objects

5. Rotating Objects

Rotating an object turns it clockwise or counterclockwise at the angle you specify.

You can rotate objects by dragging them or by entering values in the Angle of rotation box.

To rotate an object using the mouse

1. Select the object using the Pick tool.
2. Click on the object again. The handles will change from small black squares to curved arrows.
3. Click and drag the rotation handles in clockwise or counterclockwise direction to rotate the selected object.
4. Release the mouse button and the object will be rotated.

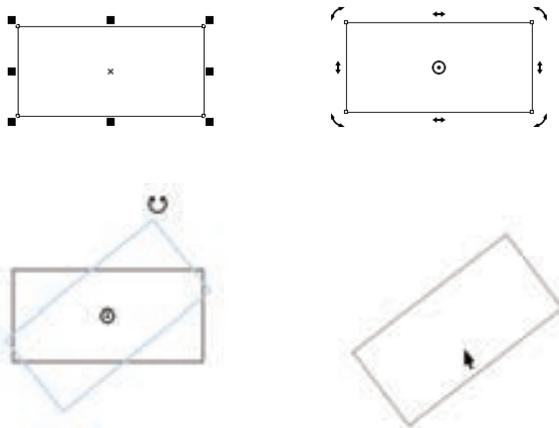


Fig. 3.39 Rotating an object using the mouse

To rotate an object using Angle of rotation box

1. Select the object using the Pick tool.
2. Placing the mouse pointer on the Angle of rotation box in the Property bar and click on it.
3. Enter the rotation angle in the Angle of rotation text box, by which you would like to rotate the object.

Angle of rotation text box



Fig. 3.40 Rotating an object using Angle of Rotation text box

6. Undoing and Redoing

CorelDRAW remembers previous actions you performed during the current session. You can undo the actions that you perform in a drawing, starting with the most recent action. If you don't like the result of undoing an action, you can redo it. Reverting to the last saved version of a drawing also lets you remove one or more actions. Certain actions applied to objects, such as stretching, filling, moving, and rotating, can be repeated to create a stronger visual effect.

Customizing the Undo settings lets you increase or decrease the number of actions that you can undo or redo.

To undo, redo, and repeat actions

To	Do the following
Undo an action	Choose Edit > Undo [Last Action]
Redo an action	Choose Edit > Redo
Revert to the last saved version of a drawing	Choose File > Revert
Repeat an action	Choose Edit > Repeat

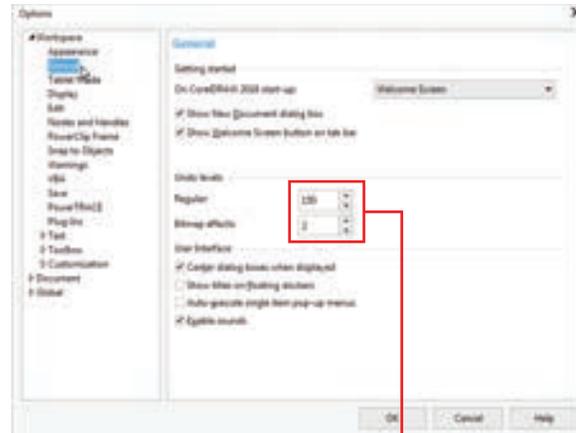
To specify the Undo settings

1. Choose Tools > Options in the menu bar.
2. In the Workspace list of categories, click General.
3. In the Undo levels area, type a value in one or both of the following boxes:
 - Regular — specifies the number of actions that can be reversed

when you use the **Undo** command with vector objects

- Bitmap effects — specifies the number of actions that can be reversed when you work with bitmap effects

The value that you specify is limited only by your computer's memory resources. The higher the value you specify, the greater the demand on memory resources.



Specify the number of Undo levels here.

Fig. 3.43 Specifying the number of Undo levels

Actions you cannot undo are :

- Change of view (zooming, scrolling, etc.)
- File operation (open, saving, importing, etc.)
- Object selection operation

The **Undo** command changes depending on the last action - for example, “Undo Fill” or “Undo Rotate”. If the action cannot be undone, or there are no actions to be undone, the command is grayed.

Immediately after using Undo, the **Redo** command becomes available, allowing you to restore what you just undid.

7. Saving a Drawing

To save a drawing

1. Choose **File > Save** in the menu bar.
2. **Save Drawing** dialog appears.
3. In the Save Drawing dialog box,
 - Type a filename in the **File name** list box.
 - Locate the folder where you want to save the file.

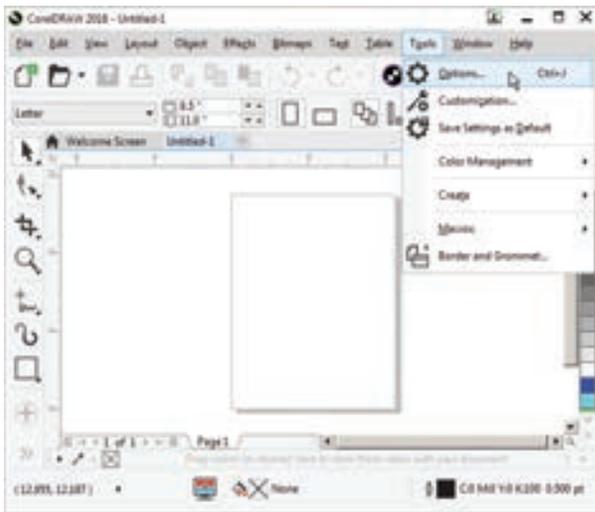


Fig. 3.41 Options in the Tools Menu

Shortcuts

To Undo an action, press **Ctrl + Z**.

To Redo an action **Ctrl + Shift + Z**.

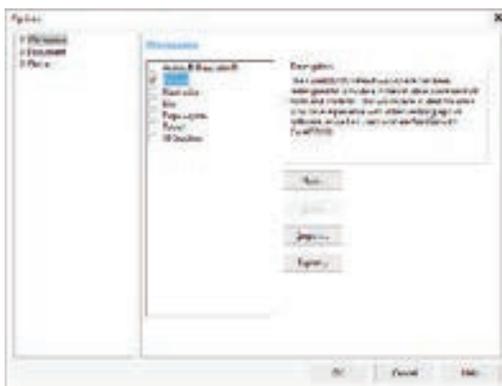
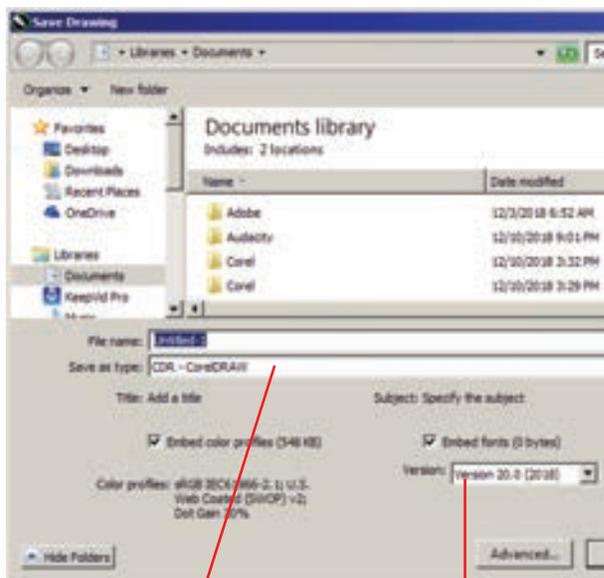


Fig. 3.42 Options dialog box

- If you want the drawing to be compatible with a previous version of CorelDRAW, choose a version from the **Version** list box.
- If you want to save the drawing to a vector file format other than CorelDRAW(CDR), choose a file format from the **Save as type**.



Fig. 3.44 Save option in the File Menu



Choose a file format from the Save as type. Version List box

Fig. 3.45 Save Drawing dialog box

7.1 Saving an existing Drawing

You can save an existing document simply by clicking the **Save** button in the Standard Toolbar or by choosing **File > Save (Ctrl + S)**, which causes your most recent changes to be saved immediately without opening any dialogs.

8. Closing Document Files

To close a document, you can use one of these actions:

1. Click the **Close** button in the upper right corner of your document window. (or)
2. Choose **File > Close** or **Window > Close Window** or Press **Ctrl + F4**.
3. If you have more than one document file open, choosing **Window > Close All** closes all files at once.

Whichever method you use to close your documents, you'll be prompted to choose whether or not to save any recent changes you've made.

When closing multiple files, CorelDRAW prompts you for saving changes to each changed document.

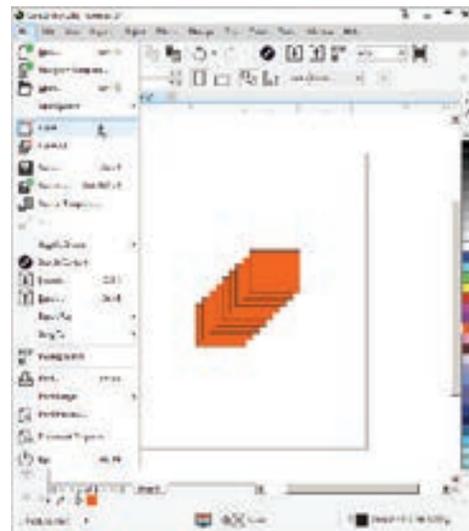


Fig. 3.46 Close option in the File Menu



Fig. 3.47 Save changes to dialog box

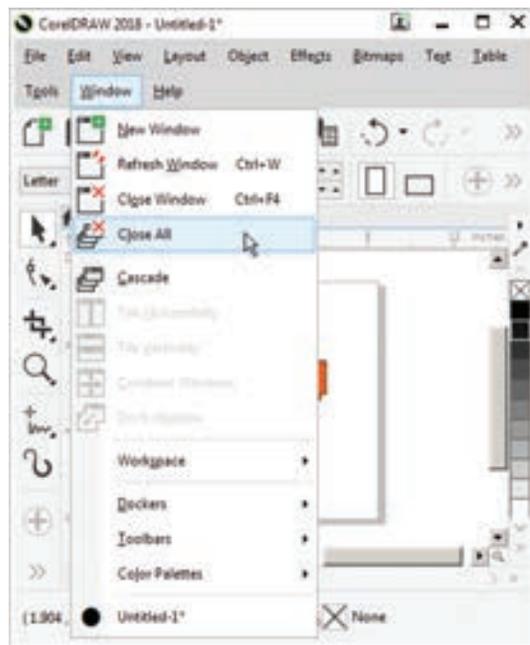


Fig. 3.48 Close All Option in the Window Menu

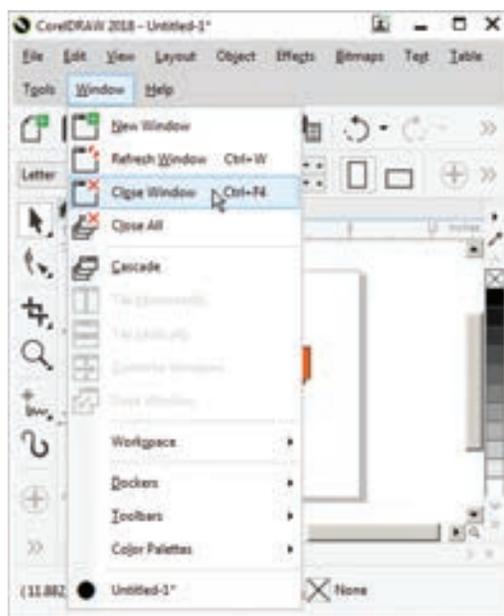


Fig. 3.49 Close Window Option in the Window Menu

9. Exiting CoreDRAW

Choosing **Exit** from the **File** menu ends the current CoreDRAW session. If you have made any changes since you last saved your file, CoreDRAW prompts you to save the file before exiting. Click **Yes** to save the changes.

Shortcut :

Pressing **Alt + F4** exits CoreDRAW.

10. Working with Objects

Selecting Objects

The drawings you made with tools are objects. To select any object, place your mouse pointer on that object and click on it.

Sometimes when your Drawing window gets crowded with objects, it can be hard to select an object using the Pick tool. So at that time you can select object using the keyboard's **Tab** key.

Selecting objects with the Tab key

To select objects using the Tab key:

1. First create at least three objects (there can be as many objects as you like) using the Rectangle tool.
2. Press the **spacebar** to select the Pick tool.
3. Then press **Tab** key until a selection box appears around the object you want to select. When you press Tab key, it selects an object, starting with the first object created and moving towards the last object.

If you press **Shift + Tab**, it selects an object, starting with the first object created and moving towards the last object created.



Selecting multiple objects

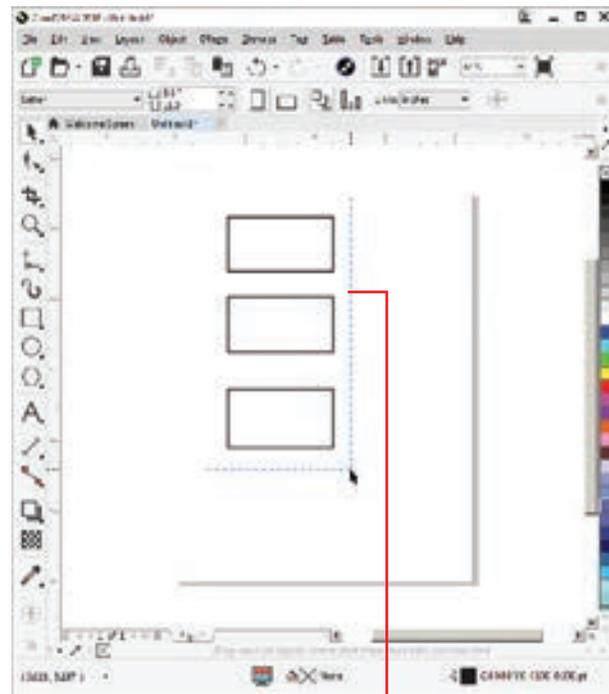
With the Pick tool, you can select more objects at a time. You can select multiple objects with the Pick tool in two ways:

1. Hold down the **Shift** key, and click on each object that you want to select.

You can select as many objects as you have in your Drawing window in this way.

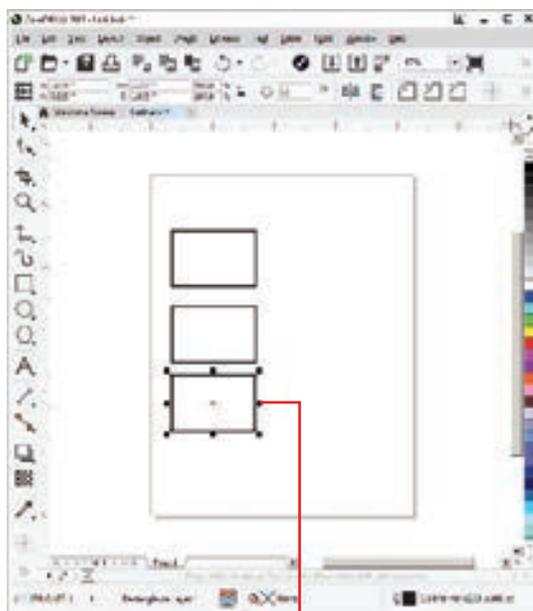
You can even deselect objects that have been selected by holding down the **Shift** Key and clicking on them.

2. You can also select more objects than one at a time by using the Pick tool to draw a marquee (rectangle) around the objects. Only those objects that are completely encompassed by the marquee that you draw with the Pick tool will be selected.



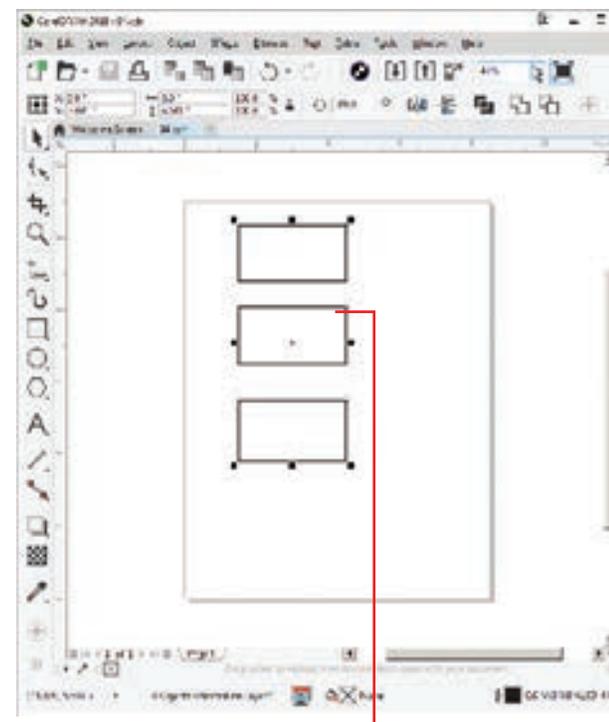
Marquee

Fig. 3.51



Six black square handles appear around the selected object

Fig. 3.50



Three Objects are selected

Fig. 3.52





TO SELECT	Do the following
To select an object	Click the object using the Pick tool.
To select multiple objects	Hold down Shift , and click each object that you want to select.
To select an object, starting with the first object created and moving towards the last object created	Press Shift + Tab until a selection box appears around the object you want to select.
To select an object, starting with the last object created and moving toward the first object created	Press Tab until a selection box appears around the object you want to select.
To select all objects	Choose Edit > Select all > Objects
To select an object in a group	Hold down Ctrl , click the Pick tool, and then click an object in a group.
To select an object in a nested group	Hold down Ctrl , click the Pick tool, and then click an object you want to select until a selection box appears around it.
To select an object hidden from view by other objects	Hold down Alt , click the Pick tool, and then click the topmost object until a selection box appears around the hidden object you want to select.
To select multiple hidden objects	Hold down Shift + Alt , click the Pick tool, and then click the topmost object until a selection box appears around the hidden objects you want to select.
To select a hidden object in a group	Hold down Ctrl + Alt , click the Pick tool, and then click the topmost object until a selection box appears around the hidden object you want to select.

Deselecting Objects

Deselecting a single object

To deselect an object,

- Click anywhere that is not an outline or high lighting box / marker. In other words, click any white space. (or)
- Press the **Esc** key.

The highlighting box disappears, indicating that no objects are selected.

Deselecting multiple objects

To deselect multiple objects, click any white space. All selected objects become deselected.





Deselecting a single object in a group

To deselect a single object among multiple selected objects, hold down **Shift** key and click the object.

Moving Objects

You can move objects by dragging them with the mouse, by nudging them with the arrow keys on your keyboard.

Moving objects using mouse.

To move an object using the mouse

1. Select the object using the Pick tool.
2. Depress the mouse while pointing to a spot on the object's outline, or within a filled area of an object. A dotted highlighting box appears.
3. Drag it to the desired location.
4. Release the mouse when the object is positioned correctly.

Moving objects in increments by nudging

The cursor keys on your keyboard allow you to move or nudge selected objects in the direction indicated by the arrow on the key.

Nudge : The act of moving a selection incrementally using the keyboard arrow keys.

Copying Objects

Objects can be copied using the **Duplicate** and **Clone** commands in the Edit menu. You can also use the Windows Clipboard.

Copying

CorelDraw provides several ways to create copies of selected objects.

1. Using the Right click

Click your right mouse button while transforming, rotating, or moving an object with the Pick tool to create a copy on the fly. The object currently being dragged becomes the copy, leaving the original object unchanged. The small + symbol beside the cursor indicates that a copy has been created.

Note : Using the right-click technique to copy an object as you transform it applies only while using the Pick tool.

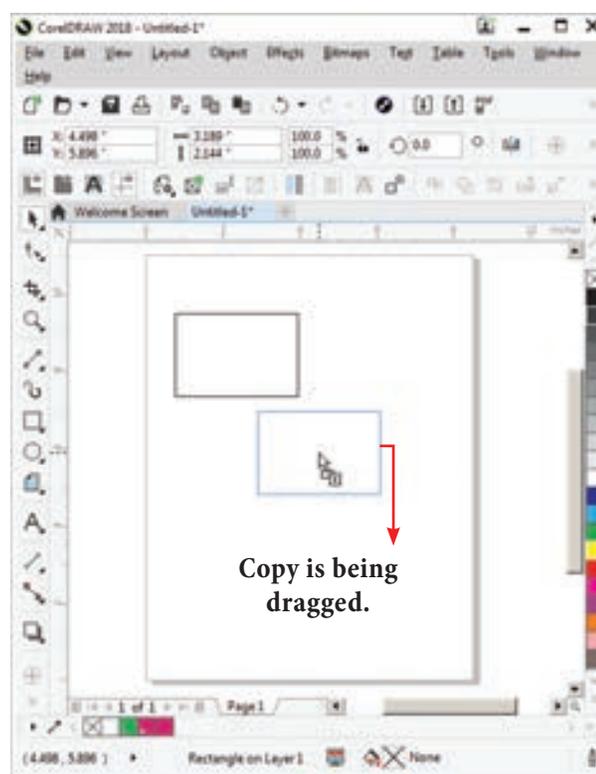
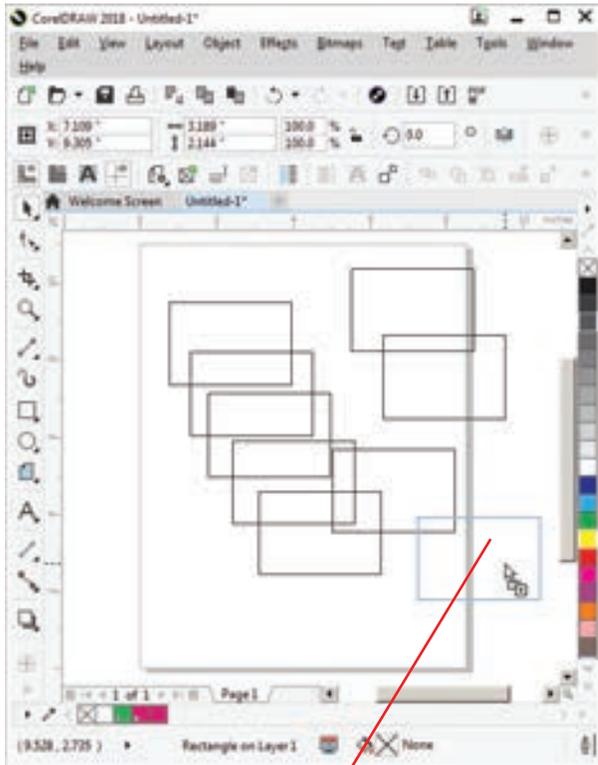


Fig. 3.53 Copying an Object Using the Right click

2. Using the SPACEBAR

Press the SPACEBAR while transforming, rotating, or moving an object with the Pick tool to create a copy. Doing this causes a copy to be created in situ, meaning a copy is 'dropped' each time the SPACEBAR is pressed.

Pressing and holding the SPACEBAR causes your key-repeat action to create multiple copies so as long as the SPACEBAR is held, which in turn creates multiple copies in quick succession.



Each time the SPACEBAR is pressed, a copy is “dropped”.

Fig. 3.54 Copying an Object Using the SPACE BAR

3. Pressing Numeric + Key

Pressing the + key on your numeric keypad creates a copy of the selected object in exactly the same position as (and arranged in front of) the original.

After pressing the + key, the copy becomes the selected object. You may create as many copies as you want using this method, but be aware that each additional copy will hide the original (or the copy) behind it.

Duplication objects

To create a copy of a selected object, Choose **Edit > Duplicate** from the menu bar (or) press **Ctrl + D** in the keyboard.

The copy will be offset slightly to the upper right of the original and placed on top as shown below. The new copy is automatically selected.

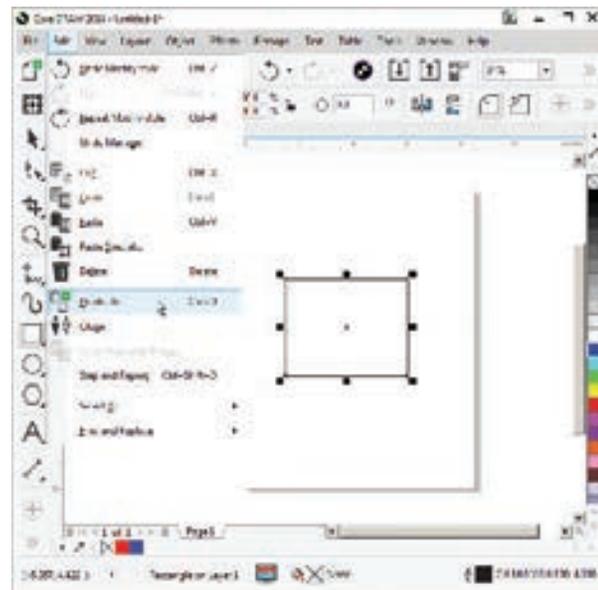


Fig. 3.55 Duplicate option in the Edit Menu

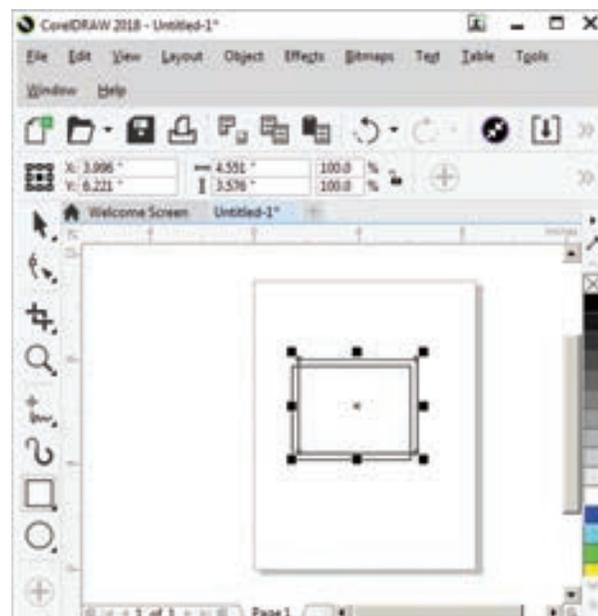


Fig. 3.56 Duplication of an Object

Cloning Objects

To create a clone of a selected object, Choose **Edit > Clone** from the menu bar.

The clone will be offset slightly to the upper right of the original and placed on top as shown below. The new copy is automatically selected.

Cloning differs from duplication in that most changes made to the original object(the “master”) are automatically applied to the clone.

For example, if you change the original’s fill, the clone’s fill changes as well.

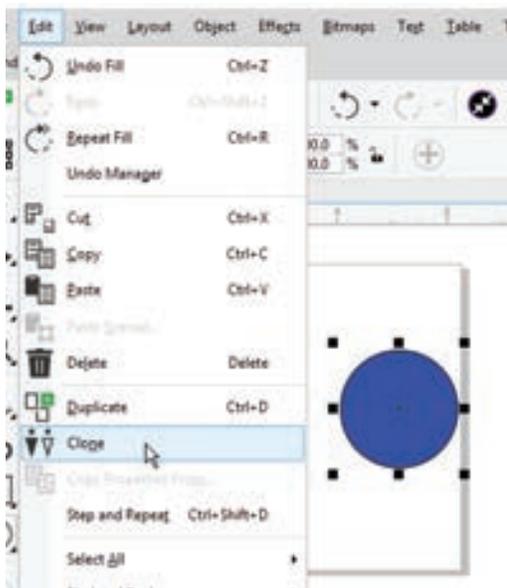


Fig. 3.57 Clone option in the Edit menu

Deleting Objects

To delete an object,

1. Select the object.
2. Choose **Edit > Delete** in the menu bar (or) press the **Del / Delete** Key in the keyboard.

To retrieve a deleted object, you must use the Undo command or press **Ctrl + Z**.

Grouping and Ungrouping objects

When you group two or more objects using Group Objects command, they are treated as a single unit.

A group behaves as if it were a single unit, meaning any changes made to a group affects all objects in the group.

You can break a grouped object into its component objects by ungrouping it. This is useful when you need to make changes to some of the individual objects that comprise a grouped object.

To create a group object

1. Select the objects with the Pick tool. (To select multiple objects hold down Shift key while selecting them.)
2. Choose **Object > Group > Group Objects** (or) Press **Ctrl + G**. The selected objects will be grouped as a single object.

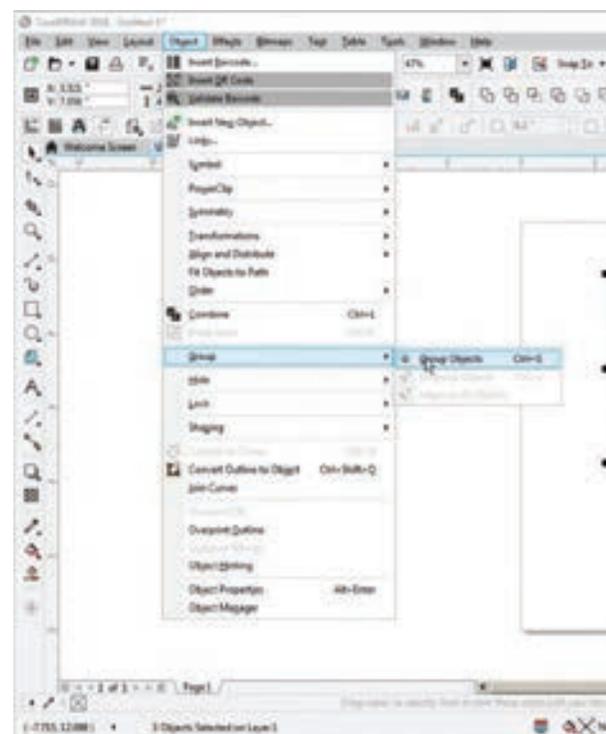


Fig. 3.58 Group objects option in the Object menu

Ungrouping

Ungrouping a group breaks the relationship among the objects.

To ungroup a group object

1. Select the grouped object using the Pick tool.
2. Choose **Object > Group > Ungroup Objects** on the menu Bar. (or) Press **Ctrl + U** in the key board (or) Click on the Ungroup Objects button on the Property Bar.

The grouped object will break into its component objects.

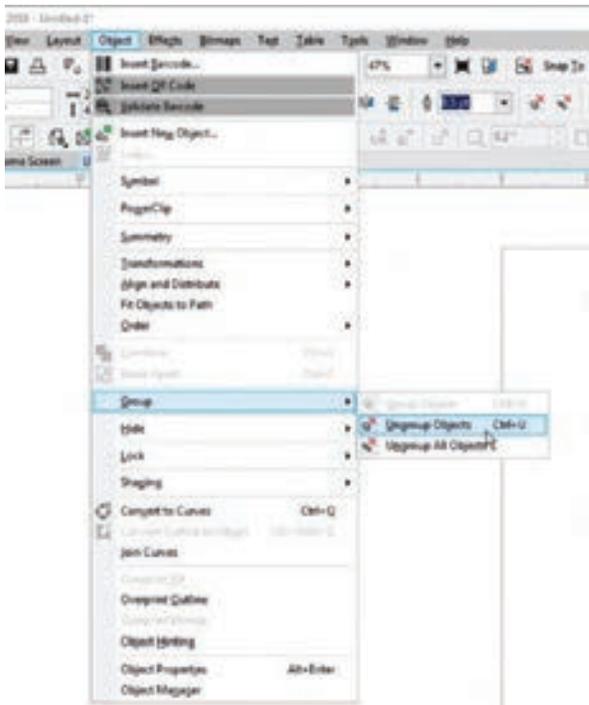


Fig. 3.59 Ungrouping objects

Since any selection of objects can be grouped, you can easily make groups of groups. Groups within groups are called “nested” groups.

To ungroup a nested groups

1. Select the nested groups using the Pick tool.

2. Choose **Object > Group > Ungroup All Objects** on the menu Bar. (or) Click on the Ungroup All Objects button on the Property Bar.

Tips

Ungroup Objects - breaks a group into individual objects, or a nested group into multiple groups.

Ungroup All objects - breaks a group into individual objects, including objects within nested groups.

Combining Objects

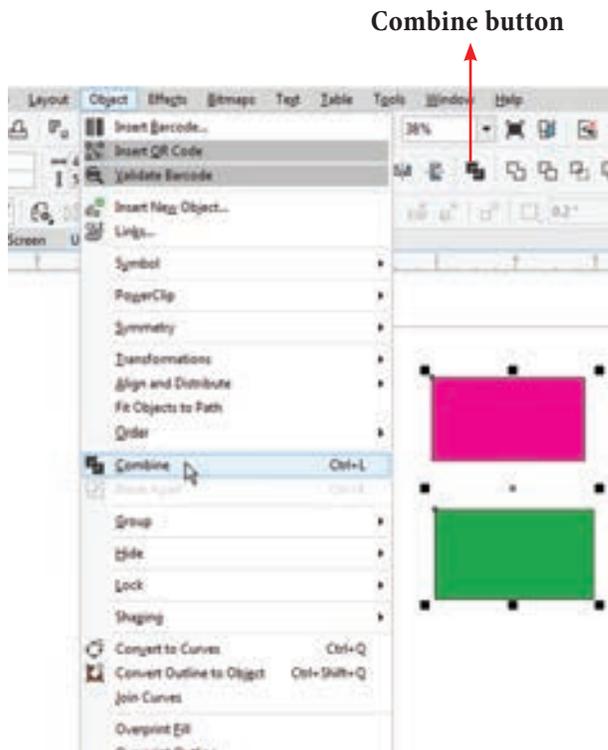
You can combine two or more objects using Combine command.

Combine command combines two or more objects and creates a single object with common fill and outline attributes.

Combining objects is different from grouping them. Combining objects actually transforms the objects that are combined. Combined objects can be broken apart. However, the objects do not revert to their original shape and fill but retain changes made when they were combined.

To Combine objects:

1. Select the objects with the **Pick tool**. (To select multiple objects hold down **Shift key** while selecting them.)
2. Choose **Object > Combine** (or) Press **Ctrl + L**. The selected objects will be grouped as a single object.



2. Choose **Object > Break Curve Apart** (or) Press **Ctrl + K**. The combined object will break apart into component objects.

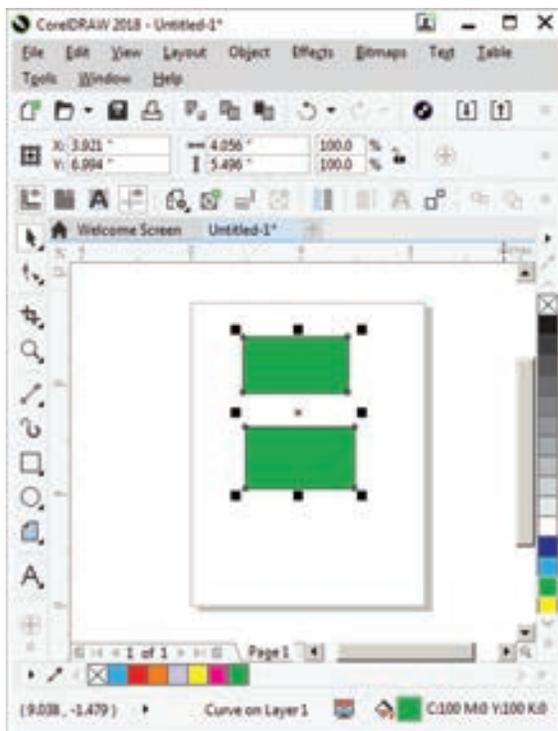
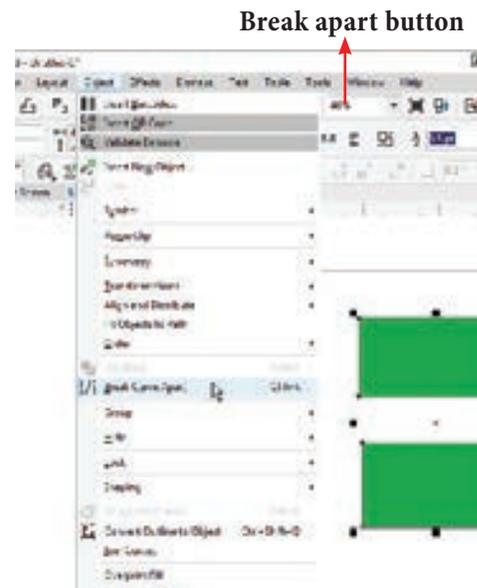
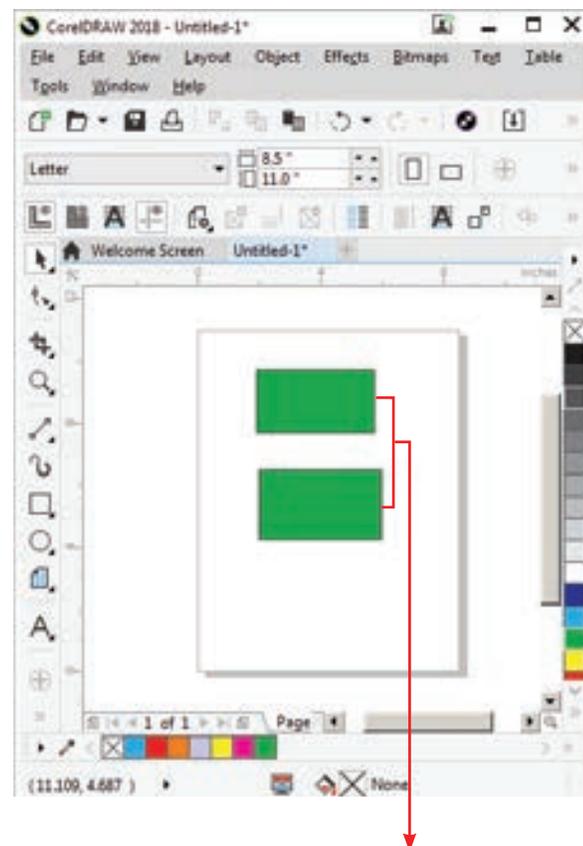


Fig. 3.60 The two objects (left) are combined to create a single object (right). The new object has the properties of the last object selected before combining.

To break apart a combined object

1. Select a combined object with the Pick tool.

Fig. 3.61 Break Curve Apart option in the Object in the Object Menu



The objects do not revert to their original fill but retain changes made when they were combined.

Fig. 3.62 Breaking apart into Component Objects



2. Position the cursor where you want the text to appear in your drawing and click. A vertical bar, called the “insertion point” appears.
3. Type the text.
4. When finished, click the Pick tool. When you click on the Pick tool, your new text will be surrounded with eight small square black handles.

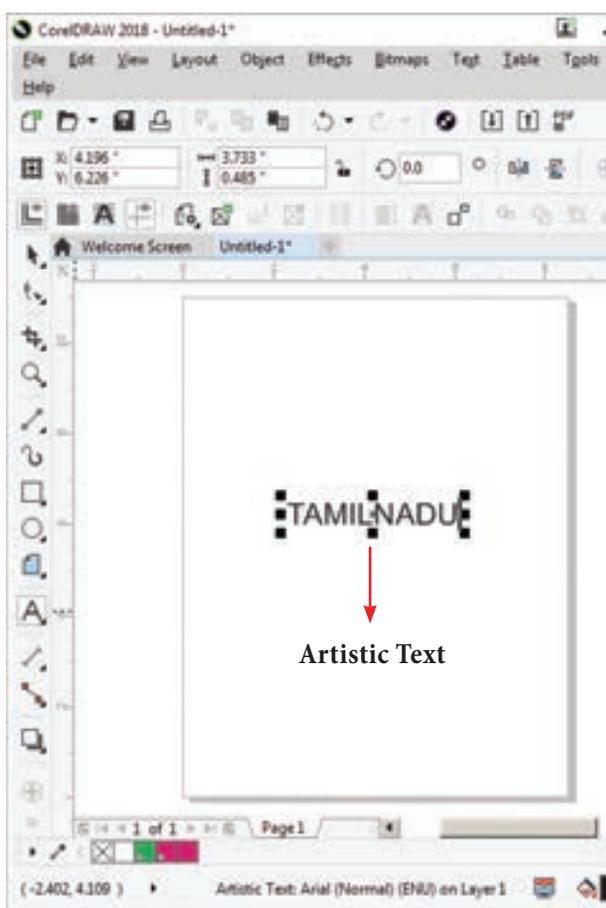


Fig. 3.65 Adding Artistic Text in the Document Page

Adding Paragraph text

Paragraph text is designed for adding lengthy blocks of text to ads, brochures and other types of text-intensive applications. Compared with Artistic text, Paragraph text offers more formatting options. For example, you can flow Paragraph text into columns, create bullet lists and set tabs and indents.

To add Paragraph text, you must first create a frame to contain it. Once text is placed in the frame, you can move the entire block by dragging the outline of the frame or any of the text inside it with the Pick tool.

Dragging the Paragraph text frame’s solid handles resizes the frame, but not the text inside it. To add the Paragraph text

1. Click the Text tool. The mouse pointer changes to a crosshair with a small ‘A’ beneath it.
2. Drag the mouse-cursor on the page diagonally to draw a text box (when you release the left button of the mouse, a text box appears on the screen with the keyboard-cursor blinking in it).
3. Then type the text in the text box. When finished, click the Pick tool.

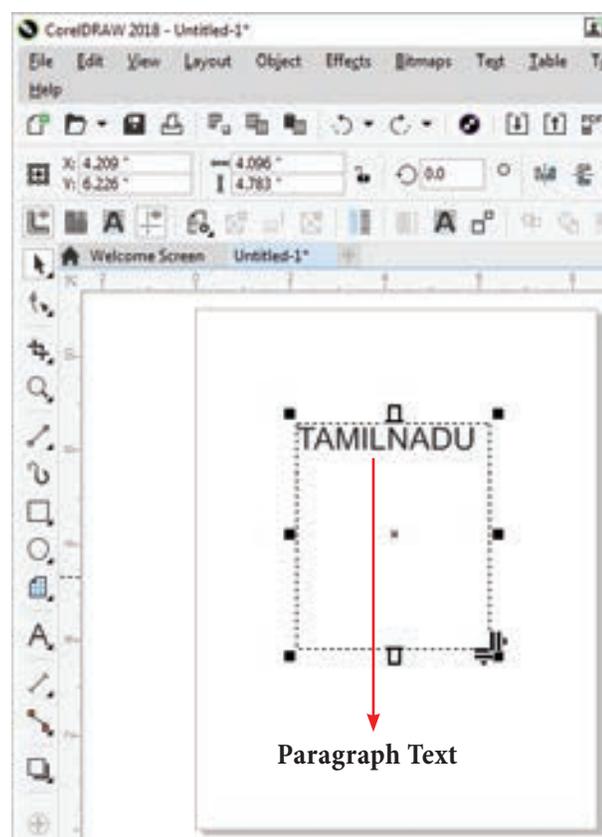
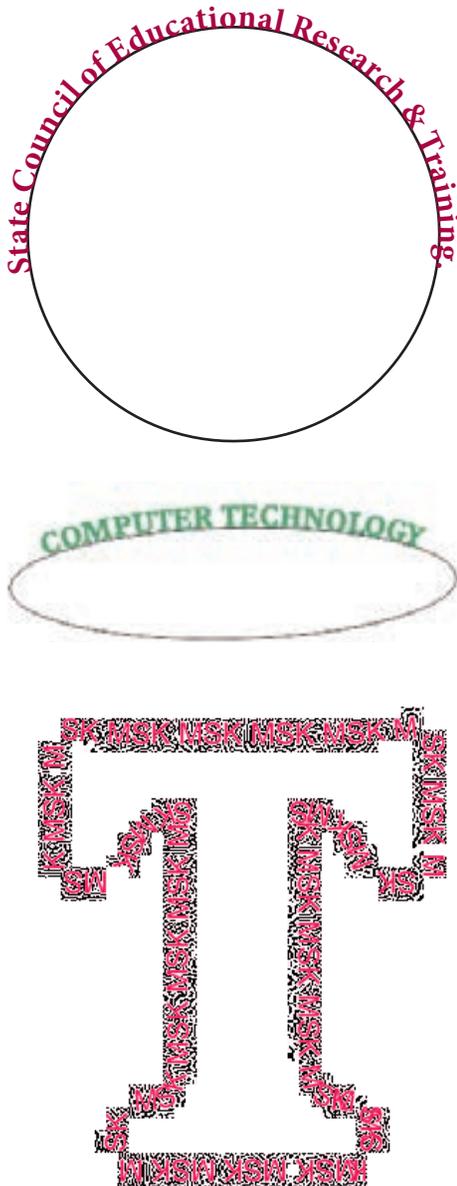


Fig. 3.66 Adding Paragraph text in the Document Page

Fitting text to a path

CorelDRAW allows you fit a string of text to any path - a straight or curved line, a rectangle, an ellipse, or another letter or text string. To fit text to a path, use the **Fit Text to Path** command in the **Text** menu. It becomes available only when you select both a text object and a non-text object at the same time.

A text string can be fitted to the “path” traced by the second object’s outline, as shown in the following examples:



To fit text to a path:

1. Select the text object and the second object using the Pick tool and the **Shift** key.
2. Choose **Fit Text To Path** from the Text menu.
3. The text is redrawn along the path of the second object.

You can remove the path object with the Delete command when the text is positioned correctly.

To remove the path object

1. Select the Shape tool and click on the path object.
2. Then Select the Pick tool and click on the path object.
3. Now press the **Delete** key. The path object is deleted.

Tips

To fit text to another letter, you must first convert the target letter to a curve object, using the **Convert to Curves** command in the **Object** menu.

Entering Text Directly onto a Path

Text can be entered directly onto most paths - curves, rectangles, ellipses, shapes, and stars.

To enter text directly onto a path

1. Using the Pick tool, select the path.
2. Choose **Text > Fit text to path** in the menu bar.
3. Move the text cursor over the outline of the target shape. The pointer changes to the Fit text to path pointer.

4. Click on it.
5. Type along the path.

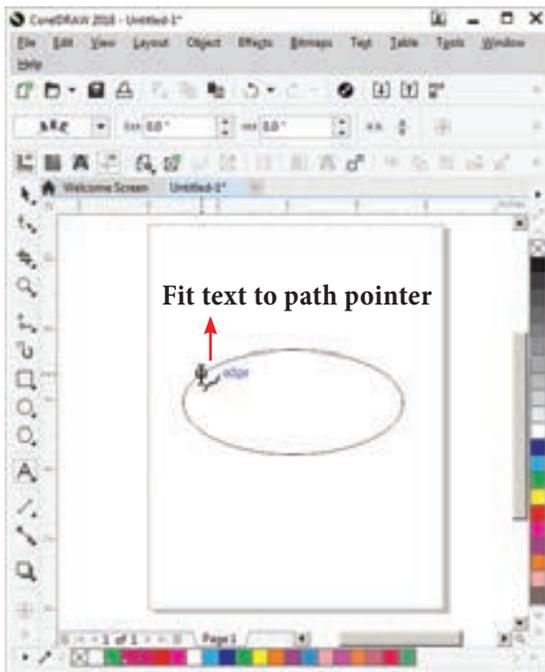


Fig. 3.67 Fit text to path pointer

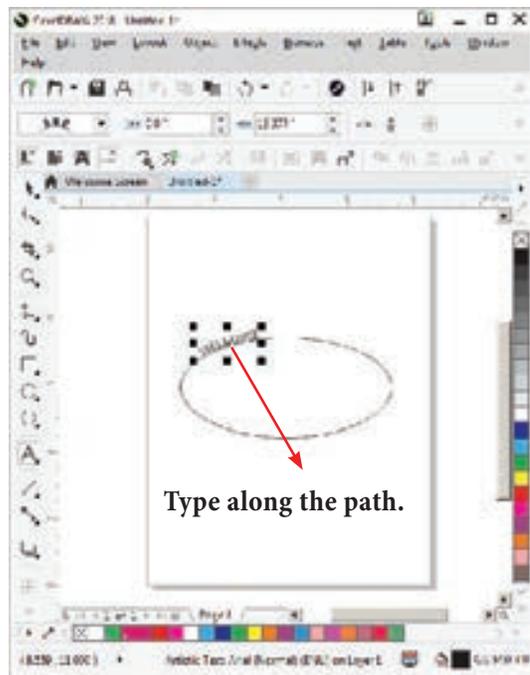


Fig. 3.68 Typing text along the path

12. PAGE SETUP

Each document page has its own set of page properties. Default document size will be single, letter-sized, and portrait-oriented

page. If you want to change the default size of the document, you will change any of these properties.

12.1 Changing Page Size

The very simple way to define your page size is to click on a blank part of the Drawing area. When you do so, the Page Layout Property bar becomes active. You can use this Property bar to define the size and orientation of your page, as well as many other attributes.

To change the Page Size

1. Click anywhere on the drawing area except the object.
2. Click on the down arrow on the Page Size list box on the Property Bar. A drop down list of several page sizes will appear.
3. Click on the page size which you like to apply to your document. The page size you have chosen will be applied to your document.

Using the Page dimensions spin boxes

You can also define custom page sizes using the Page dimensions spin boxes in the Property bar.

1. Click anywhere on the drawing area except the object.
2. Type the width and the height that you like to have for your document in the Page dimensions spin boxes.
3. The page size for the drawing will be set according to the width and height you specified.

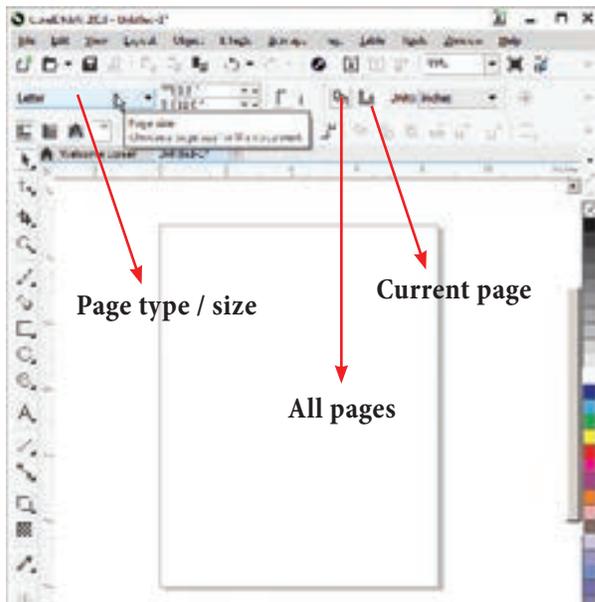


Fig. 3.69 Changing the page size

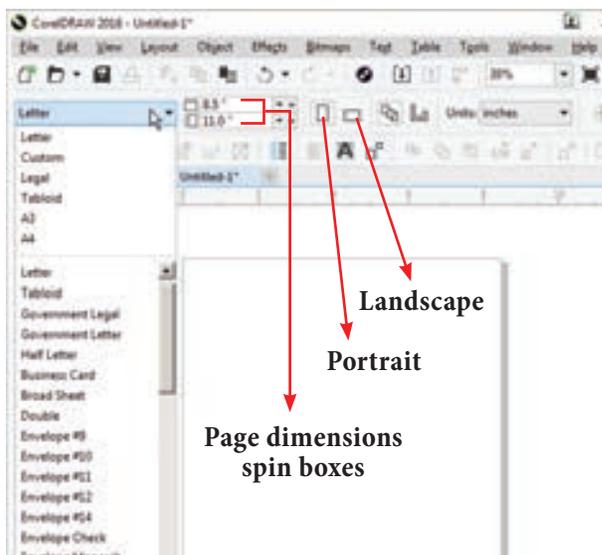


Fig. 3.70 Changing the page size using page dimensions spin boxes

12.2 INSERTING PAGES

You can add, rename and delete pages in your document. If you have a document with three or more pages, you can delete a range of pages.

Inserting a page

1. Click on **Layout** in the menu bar. The Layout menu will appear.
2. Click on **Insert page**. The **Insert Page dialog box** will appear.

3. Type the number of pages you want to add to the Insert Page dialog box.
4. Click on Before or After to specify where you want to add the page relative to the active page.
5. In multi-page documents, type a new page number in the Existing Page Box to change the relative page.
6. Click on OK button. The page will be inserted in your document.

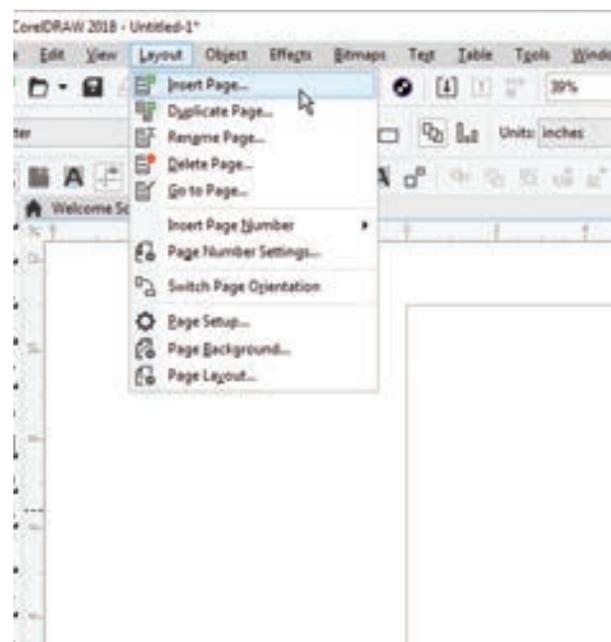


Fig. 3.71 Insert page option in the Layout Menu

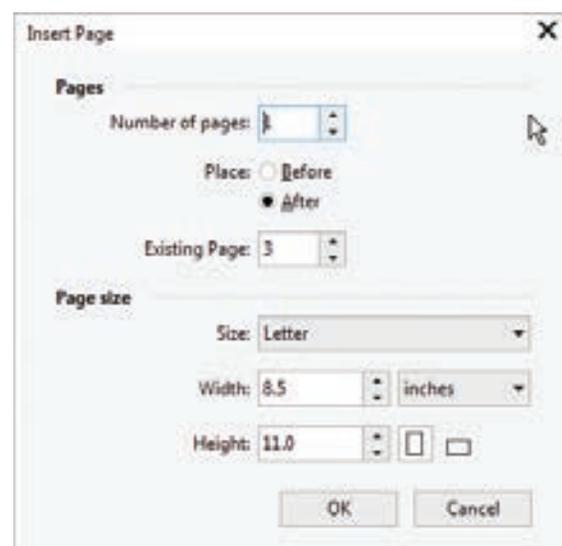


Fig. 3.72 Insert page dialog box



Renaming a Page

There may be a number of pages in your document and each page is assigned a name by default such as Page 1, Page 2, etc. You can see Page 1 is the page name beside the horizontal scroll bar. This page name has no concern whatsoever with the file name or document name with which you saved your work. You can change these page names to a more meaningful name.

To Rename a Page

1. Click on **Layout**. The layout menu will appear.
2. Click on **Rename Page**. Rename Page dialog box will appear.
3. Type the name of the page in the Page name box.
4. Click on OK button. The name of the page will be changed.

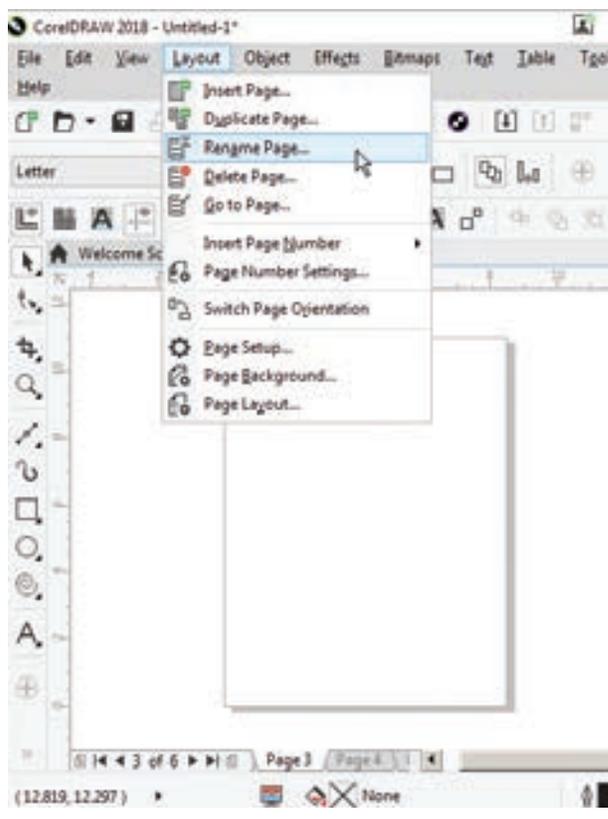


Fig 3.73 Rename page in the Layout Menu

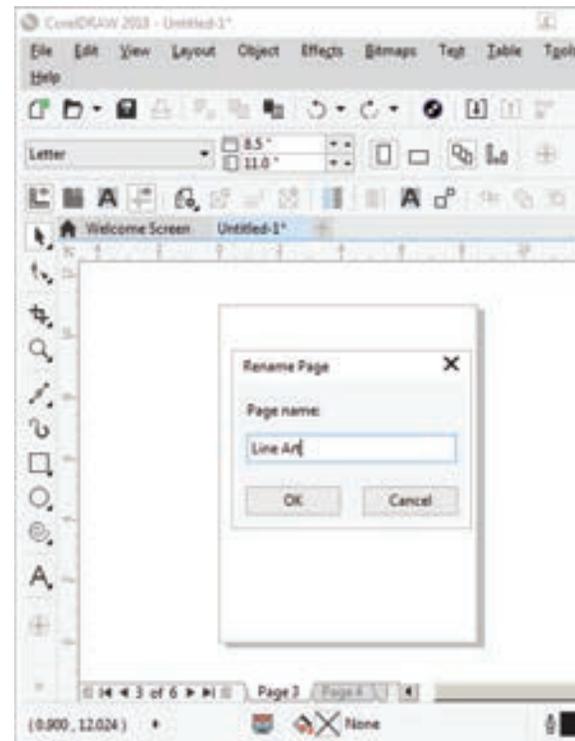


Fig 3.74 Rename page dialog box

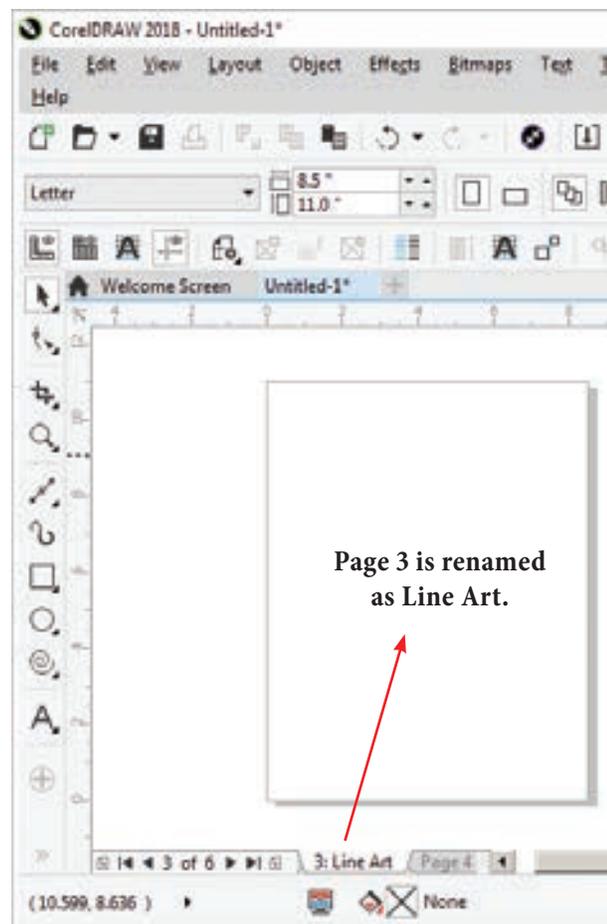


Fig 3.75

Deleting a Page

Sometimes you wish to remove a particular page from your document, you can do so by deleting that page from your document. If you are working on a multiple page document which contains more than three pages, you can delete a range of pages.

To delete a Page

1. Click on **Layout**. The Layout menu will appear.
2. Click on **Delete Page**.
Delete Page dialog box will appear.
3. Type the page number you want to delete in the Delete Page box.
4. Click on OK button.
The page will be deleted.
5. In case you want to delete multiple pages or a range of pages, type the number of first page in the Delete page box.
6. Enables the Through to page check box by clicking on it.
7. Type the number of the last page in the box beside the Through to page check box.
8. Click on OK button.

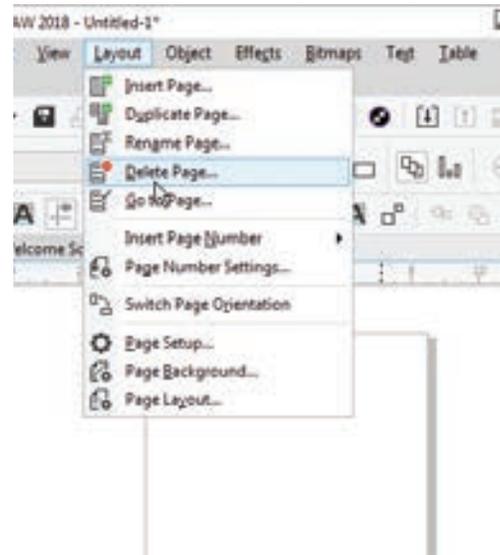


Fig 3.76 Delete page option in the Layout Menu

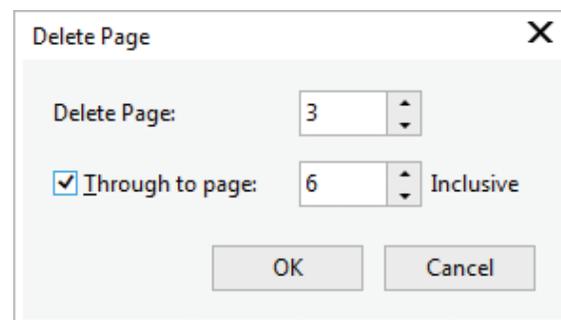
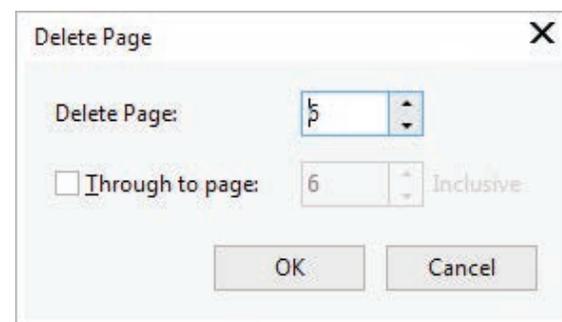


Fig. 3.77 Delete page dialog box

POINTSTOREMEMBER

- CorelDraw is a versatile graphics application for creating high quality vector illustrations, logo designs, and page layouts.
- Vector graphics are made of **lines and curves**. They are generated from **mathematical descriptions**. These graphics are ideal for **logos and illustrations**.
- Bitmaps are also known as **raster images**. They are composed of small squares called **pixels**.
- Docker is a window that contains available commands and settings relevant to a specific tool or task.
- Flyout is a button that opens a group of related tools or menu items.
- A small arrow which is in the lower right corner of a toolbox button indicates that the tool belongs to a flyout.
- There are two types of spirals. They are 1. Symmetrical spiral 2. Logarithmic spiral.
- A Symmetrical spiral expands evenly so that the distance between each revolution is equal.
- A Logarithmic spiral expands with increasingly larger distances between revolutions.
- A grid is a grouped set of rectangles that you can break apart.
- The tiny squares of colour you see in this palette are referred to as **wells**.
- CorelDRAW defines text in two ways : Artistic text and Paragraph text. You can enter text directly on the document page or through a text box. Paragraph text is better suited for long blocks of text whereas Artistic text offers you more freedom to assign artistic effects to letters.



EVALUATION

Part - I

Choose the correct answer.

1. _____ is a vector graphics application.
a) PageMaker b) Photoshop
c) CorelDRAW d) MS Word
2. Vector graphics are made of _____.
a) Lines and curves b) only lines
c) pixels d) None of these
3. _____ are also known as raster images.
a) Vector graphics b) Bitmaps
c) Lines d) None of these
4. By using _____ you can create vector graphics.
a) PageMaker
b) Photoshop
c) CorelDRAW
d) MS Word

5. _____ is next to Standard tool bar.

- a) Property bar
- b) Title bar
- c) Menu bar
- d) status bar

6. Which tool is used to select an object?

- a) Shape tool
- b) Zoom tool
- c) Pick tool
- d) Crop tool

7. Which tool is used to draw a circle?

- a) Shape tool
- b) Ellipse tool
- c) Rectangle tool
- d) Crop tool

8. How many types of Spirals are there?

- a) 5 b) 3 c) 2 d) 7

9. _____ key is used to select the Freehand tool.

- a) F2 b) F3 c) F4 d) F5

10. To close a document in CorelDRAW, press _____

- a) Ctrl + F4 b) Ctrl + F3
- c) Shift + F4 d) Ctrl + F2

11. To exit CorelDraw, press _____

- a) Ctrl + F4 b) Ctrl + F3
- c) Shift + F4 d) Alt + F4

12. _____ key is used to deselect a single object.

- a) Esc b) Ctrl
- c) Shift d) Delete

13. _____ key combination is used to create a duplicate of a selected object.

- a) Ctrl + D b) Ctrl + C
- c) Ctrl + S d) Ctrl + A

14. To break apart a combined object, press _____

- a) Ctrl + K b) Ctrl + C
- c) Ctrl + S d) Ctrl + A

15. To combine two or more objects press _____

- a) Ctrl + D b) Ctrl + L
- c) Ctrl + S d) Ctrl + A

Part - II

Answer the following Questions

(2 Marks)

1. What is CorelDRAW used for?
2. Write the steps to create a New Document in CorelDRAW.
3. What is a docker in CorelDRAW?
4. Write the steps to start CorelDRAW.
5. What is an object in CorelDRAW?
6. What is a property bar in CorelDRAW?
7. Why is a ruler used for in CorelDRAW?
8. Why is an artistic Media tool used in CoreDRAW?
9. Write the steps to group objects.
10. Write the steps to ungroup a grouped object.

Part - III

Answer the following Questions

(3 Marks)

1. What are the differences between Vector graphics and bitmaps?
2. Write the steps to draw a rectangle in CorelDRAW.
3. Write the steps to draw a circle in CorelDRAW.
4. What are the two types of spirals? Explain.

5. Flyout of which tool has star tool in it? What is that tool's keyboard shortcut?
6. To correct your mistake in CorelDRAW what should you do? What is the keyboard shortcut to do it?
7. What do you do to convert a line into an arrow?
8. How will you assign a fill colour and outline colour to an object?
9. How to create duplication objects and Cloning objects? Write the difference between them.

10. What do you achieve by welding objects? Write the steps to weld objects.

Part - IV

Answer the following Questions

(5 Marks)

1. Write the steps to draw a spiral.
2. Write the steps to draw a polygon.
3. How to create a star in CorelDRAW?
4. Write the steps to draw a grid.
5. Brief about Fitting text to a path.

Student Activities

1. Design a collage of photos you have in a creative way using CorelDRAW.
2. Create a newspaper advertisement for a product of your interest using CorelDRAW.